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Exelon Nuclear

10 CFR 50.55a

February 23, 2010

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Limerick Generating Station, Units 1 and 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

Subject: Submittal of Program for the Third Ten-Year Interval Inservice Testing Program

In accordance with the ASME Code (ISTA-3200(a)), attached for your information is a copy of the Third Ten-Year Interval Inservice Testing (IST) Program for Limerick Generation Station (LGS), Units 1 and 2. The third interval of the LGS, Units 1 and 2, IST program complies with the ASME OM Code, 2004 Edition.

There are no regulatory commitments contained within this letter.

If you have any questions or require additional information, please call Tom Loomis (610-765-5510).

Respectfully,

D. P. Helker

David P. Helker
Manager – Licensing & Regulatory Affairs
Exelon Generation Company, LLC

Attachment: Limerick Site Pump and Valve Inservice Testing Program

cc: USNRC Region I, Regional Administrator
USNRC Senior Resident Inspector, LGS
USNRC Project Manager, LGS
R. R. Janati, Bureau of Radiation Protection

ATTACHMENT

Limerick Site Pump and Valve Inservice Testing Program

Exelon Nuclear

LIMERICK SITE PUMP AND VALVE INSERVICE TESTING PROGRAM TEN YEAR INTERVAL (currently 3rd)

Approved February 18, 2010

Limerick Generating Station
3146 Sanatoga Road
Pottstown, PA 19464

LIMERICK

Unit 1&2

Commercial Service Dates:

Unit 1 – February 1, 1986
Unit 2 – January 8, 1990

Revision Date:02/18/2010

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1.0 PURPOSE

1.1 To provide requirements for the performance and administration of assessing the operational readiness of those pumps and valves whose specific functions are required to:

- Shutdown the reactor to the safe shutdown condition,
- Maintaining the safe shutdown condition, or
- To mitigate the consequences of an accident.

1.2 The program plan was prepared to meet the requirements of the following subsections of the American Society of Mechanical Engineers (ASME) OM Code-2004 Edition.

- Subsection ISTA, "General Requirements"
  ISTA contains the requirements directly applicable to inservice testing including the Owner's Responsibility and Records Requirements.

- Subsection ISTB, "Inservice Testing of Pumps in Light-Water Reactor Nuclear Power Plants"
  Establishes the requirements for inservice testing of pumps in light-water reactor nuclear power plants. The pumps covered are those provided with an emergency power source, that are required in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of an accident. These pumps are either centrifugal or positive displacement type pumps.

- Subsection ISTC, "Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants"
  Establishes the requirements for inservice testing of valves in light-water reactor nuclear power plants. The valves covered include those which provide overpressure protection and are required to perform a specific function, either actively by changing valve obturator position or passively by effectively maintaining required obturator position in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of an accident.

- Mandatory Appendix I, "Inservice Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants"
  Provides the requirements for performance testing and monitoring of nuclear plant pressure relief devices. Methods, intervals, and record requirements for monitoring and testing are established, as well as guidelines for the evaluation of results. Applies to safety valves, safety relief valves, pilot-operated pressure relief valves, power-actuated pressure relief valves, non-reclosing pressure relief devices and vacuum relief devices, including all accessories and appurtenances.

- Mandatory Appendix II, "Check Valve Condition Monitoring Program"
  Provides an alternative to the testing or examination requirements of ISTC-3510 through ISTC-5221. The purpose of this program is both to improve valve performance and to

optimize testing, examination and preventative maintenance activities in order to maintain the continued acceptable performance of a select group of check valves.

1.3. This plan will be updated as required in accordance with 10CFR50.55a(f).

This program plan provides a complete listing of those pumps and valves included in the program per the requirements of:

- ISTA "General Requirements"
- ISTB "Inservice Testing of Pumps in Light-Water Reactor Nuclear Power Plants"
- ISTC "Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants"
- Mandatory Appendix I "Inservice Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants"
- Mandatory Appendix II "Check Valve Condition Monitoring Program"

The key features of this Plan are: the Pump and Valve table listings, Relief Requests, Refueling Outage Justifications, Cold Shutdown Justifications, and Technical Positions.

The Limerick Basis Document includes the justification for inclusion of components in the scope of IST and the justification for excluding components from the program.

2.0 TERMS AND DEFINITIONS

2.1. **Active valves** - Valves which are required to change obturator position to accomplish a specific function in shutting down a reactor to the safe shutdown condition, maintaining the safe shutdown condition, or mitigating the consequences of an accident.

2.2. **Administrative Controls** - A valve shall be considered to be under administrative control if the valve is locked or de-energized in its normal position, or procedurally controlled if mispositioned. Administrative controls may also consist of stationing a dedicated operator at the controls of the valve, who is in continuous communication with the control room.

2.3. **Containment Isolation** - Any valve which performs a containment isolation function and is included in the Appendix J, Type C, Local leak Rate Test program, or any valve designed to perform a containment isolation function but is exempt from Type C testing due to its attachment to a closed system or due to the presence of a 30 day water seal.

2.4. **Exercising** - The demonstration based on direct or indirect visual or other positive Indication that the moving parts of a valve function satisfactorily.

2.5. **Instrument Loop Accuracy** - The allowable inaccuracy of an instrument loop based on the combination of the inaccuracies of each instrument or component in the loop or the output for a known input to the loop.

2.6. **Instrument Loop** - Two or more instruments or components working together to provide a single output (e.g., a vibration probe and its associated signal conditioning and readout devices).

2.7. **Operational Readiness** - The ability of a pump or valve to perform its intended safety function.

2.8. **Passive valves** - Valves that maintain obturator position and are not required to change position to accomplish the required functions(s) in shutting down a reactor to the safe shutdown, maintaining the safe shutdown condition, or mitigating the consequences of an accident.

2.9. **Pressure Isolation Valve** - Any valve which acts as an isolation boundary between the high pressure Reactor Coolant System and a system having a lower operating or design pressure.

2.10. **Reference Values** - One or more values of test parameters measured or determined when the equipment is known to be operating acceptably.

2.11. **System Resistance** - The hydraulic resistance to flow in a system.

3.0 RESPONSIBILITIES

3.1. **Site IST Program Manager** – Functions as the Limerick Station Subject Matter Expert for Inservice Testing Program.

3.2. **Branch Manager of IST Program Manager** – Site Functional Area Manager (SFAM) for T&RM ER-LG-321-1002.

4.0 INTRODUCTION

4.1 **Program Interval**

The first 10-year intervals for LGS Units 1 and 2 began on February 1, 1986 and January 8, 1990, respectively. By letter dated January 23, 1996, the NRC granted approval to a request to delay updating the Unit 1 IST Programs until the completion of the first 10-year interval for Unit 2. This action placed Units 1 and 2 on concurrent intervals as discussed in NUREG 1482, Section 3.3.2. Therefore, the scheduled start date for the second 10-year interval for both Units was January 8, 2000. The start of the second 10-year interval was delayed as permitted by

Paragraph IWA 2430(d) of the 1989 Edition of Section XI (ISTA 2.2.3(d) of the OM-1990 Code).

The start date for the second 10- year interval for the LGS Units 1 and 2 IST Program was August 8, 2000. The scheduled completion date remained at January 7, 2010 in order to preclude inadvertently extending the start of the next interval past the cumulative one year limit.

The start date for the third 10-year interval for the LGS Units 1 and 2 IST Program is February 18, 2010 and the scheduled completion date is January 7, 2020.

5.0 INSERVICE TESTING PLAN FOR PUMPS

5.1 Pump Inservice Testing Plan Description

This program plan meets the requirements of the ASME OM Code-2004 with the exception of specific relief requests listed in Attachment 2.

5.2 Pump Plan Table Description

The pumps included in the Limerick IST Plan are listed in Attachment 12. The information contained in these tables identifies those pumps to be tested to the requirements of the ASME OM Code, the testing parameters, and associated relief requests. The headings for the pump tables are delineated below.

System — The system abbreviation codes for the system containing the pump.

Pump Name — The descriptive name for the pump.

Pump EPN — The unique Equipment Part Number (EPN) for the pump.

Safety Class — The ASME Code classification of the pump:
- 1 - Class 1
- 2 - Class 2
- 3 - Class 3
- SR - Non-Code, Safety-Related
- NS - Non-Safety-Related

Group — The ASME OM Code pump group
- Group A — Operated continuously or routinely
- Group B — Not operated routinely except for testing.

P&ID — The Piping and Instrumentation Diagram on which the pump is represented.

P&ID Coor. — The coordinates of the pump location on the P&ID.

Pump Type — The type of pump.

C	Centrifugal
PD	Positive Displacement
VLS	Vertical Line Shaft

Pump Driver — The type of pump driver.

Motor	Motor driven
Turbine	Steam turbine driven
Engine	Engine Driven (Diesel)

Test Type — Measured test parameters.

N	Pump Speed
DP	Differential Pressure
P	Discharge Pressure
Pc	Discharge Pressure-Comprehensive Test only
Q	Flow Rate
V	Vibration
Vc	Vibration-Comprehensive Test only

A - Denotes a Group A Pump Test
B - Denotes a Group B Pump Test
C - Denotes a Comprehensive Pump Test

Test Freq. — The frequency for performing the specified inservice test. Test frequency is not listed in Attachment 12 since All pumps are tested Quarterly and Comprehensive Tests are performed Biennially.

Relief Request — A relief request number is listed when the NRC has approved a request to deviate from a specific code requirement. Attachment 2 contains an index of all pump relief requests included in Attachment 3.

Tech. Pos. — A technical position number is listed in the Remarks when the requirements of the code are not easily interpreted and clarifying information is needed. A technical position is used to document how Code requirements are being implemented at the station. Technical Positions are prefixed with "TP". Attachment 10 contains an index of all the Station Technical Positions included in Attachment 11.

Remarks — Additional pump information

5.3 **Code Requirements**

Reference values for Comprehensive Tests use the required accident flow as design flow rate per ISTB-3300(e)(1).

6.0 INSERVICE TESTING PLAN FOR VALVES

6.1 Valve Inservice Testing Plan Description

This program plan meets the requirements of the ASME OM Code-2004 with the exception of specific relief requests listed in Attachment 4.

Where the frequency requirements for valve testing have been determined to be impracticable, Cold Shutdown or Refuel Outage Justifications have been identified and written. These justifications are listed in Attachments 6 and 8 respectively.

6.2 Valve Plan Table Description

The valves included in the Limerick IST Plan are listed in Attachment 13. The information contained in these tables identify those valves that are to be tested to the requirements of the ASME OM Code, the test parameters, frequency of testing, and the associated relief requests. The headings for the valve tables are delineated below.

System	The system abbreviation codes for the system containing the valve.
Valve EPN	The unique Equipment Part Number (EPN) for the valve
Safety Class	The ASME Code classification of the valve. 1 - Class 1 2 - Class 2 3 - Class 3 SR - Non-Code, Safety-Related NS - Non-Safety-Related
P&ID	The Piping and Instrumentation Drawing on which the valve is represented.
P&ID Coor.	The coordinates of the valve location on the P&ID.

Category — The ASME OM Code defined category (or categories)

A	Seat Leakage Limited.
B	Seat Leakage Not Required.
C	Self-Actuating Valves.
D	Single Use Valves.
A/C	Both Categories A and C.
B/C	Both Categories B and C.

Size — The nominal pipe size of the valve, in inches.

Valve Type — The valve body style abbreviation.

BF	Butterfly
BL	Ball
CK	Check
DI	Diaphragm
EX	Explosive
GL	Globe
GT	Gate
RD	Rupture Disk
RL	Relief
SK	Stop-check
TC	Testable Check
TW	Three-way
VR	Vacuum Relief
XC	Excess Flow Check

Act. Type — The actuator type abbreviation.

AO	Air Operator
EX	Explosive
HYD	Hydraulic
MA	Manual
MO	Motor Operator
SA	Self-Actuated
SO	Solenoid Operator

Active/Passive — Active or Passive valve as defined per ASME OM Code.

A — Active
P — Passive

Normal Position — The normal position abbreviation. The valve's position during normal power operation. If the system does not operate during power operation, then the normal position is the position of the valve when the system is not operating.

C — Closed
LC — Locked Closed
• — Open
OC — Open or Closed
LO — Locked Open
T — Throttled

Safety Position — The safety function position(s). For valves that perform safety functions in the open and closed positions more than one safety function position may be specified. Active position is listed unless the valve only has a passive safety function, in which case the passive position is listed.

C — Closed
O — Open
OC — Open and Closed
T — Throttled

Fail Safe Position	The fail position for valves with fail-safe actuators	
	AI	As-Is Valves fail in place
	C	Closed
	O	Open
App. J Type C	Containment Isolation Valve	
	Y	Yes
	N	No
Test Type	The test type abbreviation.	
	LJ	Leakage Rate Test PER 10CFR50 Appendix J
	LP	Leak Rate Test per ISTC 3630
	BD	Check Valve Bidirectional Test
	ET	Full Stroke Test
	PT	Partial Exercise
	ST	Stroke Time Test
	RD	Rupture Disk
	XT	Explosive Valves
	FS	Fail Safe Test Closed
	PI	Position Indication Test
	RT	Relief Valve Test
	DI	Disassembly and Examination
	RP	Replace Thermal PSV
Test Freq.	The test frequency abbreviations	
	B	In Accordance with 10CFR50, Appendix J, Option B
	Q	Quarterly
	C	Cold Shutdown
	R	Refuel Outage
	T	Two Years
	DI@	Following Disassembly and Inspection
	P1	50% each Refueling Outage per TS 4.4.2.2
	P2	Every 5 years
	P3	Every 10 years
	P4	At least 1 Squibb each 24 months during shutdown; 100% within 3 operating cycles per TS 4.1.5d.1
	P5	1 Squibb each 24 months; 100% in 120 months per TS 4.6.3.5b
	P6	Per Condition Monitoring Plan
	TS	Per Technical Specification
Relief Request	A relief request number is listed when the NRC has approved a request to deviate from a specific code requirement. Attachment 4 contains an index of all valve relief requests included in Attachment 5.	

Deferred Just. — Deferred Test Justification. This section refers to Cold Shutdown Justifications and Refuel Outage Justifications.

A Cold Shutdown Justification number is listed when the testing frequency coincides with Cold Shutdowns instead of being performed quarterly. Cold Shutdown Justification numbers for valves are prefixed with "VCS". Attachment 6 contains an index of all the Cold Shutdown Justifications included in Attachment 7.

A Refuel Outage Justification number is listed when the testing frequency coincides with Refuel Outages instead of being performed quarterly or during Cold Shutdowns. Refuel Outage Justification numbers for valves are prefixed with "ROJ". Attachment 8 contains an index of all the Refueling Justifications included in Attachment 9.

Tech. Pos. — A technical position number is listed in the Remarks when the requirements of the code are not easily interpreted and clarifying information is needed. A technical position is used to document how Code requirements are being implemented at the station. Technical Positions are prefixed with "TP". Attachment 10 contains an index of all the Station Technical Positions included in Attachment 11.

6.3 Code Requirements

6.3.1 Acceptance Criteria and Limiting Values

In accordance with ASME OM Code-2004, ISTC 5121, 5131and 5151 the limiting values of full stroke time shall be determined as described in the table below or a more conservative Tech Spec or UFSAR design limit. The Table contains station specific values in accordance with Exelon Procedure ER-AA-321 Rev 10 Att 3.

Valve Operator	Reference Stroke Time (sec)	Acceptance Criteria (sec)	Limiting Values (1)
MOVs (3)	Tref > 10	0.85Tref - 1.15Tref	1.3Tref
	Tref < or = 10	0.75Tref - 1.25Tref (2)	1.5Tref
Other (AOVs, HOVs, SOVs,	Tref > 10	0.75Tref - 1.25Tref	1.5Tref
	Tref < or = 10	0.50Tref - 1.50Tref	2.0Tref
All	Tref < 2	< or = 2.0	2.0 sec

Notes: (1) If Tech Spec or UFSAR design limits are more limiting, they shall be used.
(2) Tref ± 1 may be used instead of 0.75Tref - 1.25Tref

6.3.2 PSV Grouping Criteria

Mandatory Appendix I Sec I-1200 defines a valve group as valves of the same manufacturer, type, system application and service media. No specific guidance is provided regarding these parameters. Although the clarifications specified in NUREG 1482 have made the establishment of test groups somewhat more uniform, several ambiguities remain. In order to attempt to meet the intent of the Code, certain assumptions must be made. The basic premise for these assumptions is that the purpose of placing the valves in groups is to maximize the potential of detecting common mode failures. A discussion of the principles used to define valve type, system application, and service media follow.

Valve Type
Valves utilizing the same means of actuation (e.g., direct-acting spring type, bellows-actuated, etc.) and having similar materials of construction and body styles are considered to be of the same type. In cases where there is any uncertainty, manufacturer's drawings are used to determine if valves are of the same type.

System Application
The system application requirement is assumed to include such criteria as size, normal operating pressures and temperatures, relief setpoints, capacity, function (e.g., thermal expansion vs. full flow relief), etc. A certain amount of ambiguity is inherent when grouping valves according to system application, because the parameters are not required to be equal. Valves in systems which are exposed to essentially the same chemical and physical conditions are usually considered to have the same system application. For example, relief valves in low to moderate ECCS applications may have the same system application, even though they vary in size, setpoints or normal operating conditions. Significant differences in these parameters, however, would tend to preclude them from being grouped together.

Service Media
Service media is actually a factor or subset of the system application requirement. However, since it is specified separately by the Code, it is addressed separately here. Chemical and physical properties are the primary consideration in determining when the service media are the same. For example, steam and water are considered different service media. Likewise, raw water, deionized water, borated water, chromated water, etc, are all considered as different service media due to differences in conductivity and corrosion characteristics. On the other hand, clean dry air would usually be considered the same as nitrogen except in high temperature applications

The program owner maintains a record of group composition.

7.0 ATTACHMENTS

1. System and P&ID Listing
2. Pump Relief Request Index
3. Pump Relief Requests
4. Valve Relief Request Index
5. Valve Relief Requests
6. Cold Shutdown Justification Index
7. Cold Shutdown Justifications
8. Refueling Outage Justification Index
9. Refueling Outage Justifications
10. Technical Position Index
11. Technical Positions
12. Inservice Testing Pump Table
13. Inservice Testing Valve Table

ST Program Plan
Limerick Unit 1 & 2

ATTACHMENT 1

SYSTEM AND P&ID LISTING

System Number and P&ID	System Name
M-01	Main Steam
M-11	Emergency Service Water
M-12	Residual Heat Removal Service Water
M-13	Reactor Enclosure Cooling Water
M-15	Compressed Air
M-20	Fuel & Diesel Oil Storage & Transfer and Starting Air
M-26	Plant Process Radiation Monitoring
M-41	Nuclear Boiler
M-42	Nuclear Boiler Vessel Instrumentation
M-43	Reactor Recirculation Pump
M-44	Reactor Water Clean-up
M-46	Control Rod Drive Hydraulic - Part A
M-47	Control Rod Drive Hydraulic - Part B
M-48	Standby Liquid Control
M-49	Reactor Core Isolation Cooling
M-50	Reactor Core Isolation Cooling Pump/Turbine
M-51	Residual Heat Removal
M-52	Core Spray
M-53	Fuel Pool Cooling and Cleanup
M-55	High Pressure Coolant Injection
M-56	High Pressure Coolant Injection Pump/Turbine
M-57	Containment Atmosphere Control
M-58	Hydrogen Recombiners
M-59	Primary Containment Instrument Gas
M-60	Primary Containment Leak Testing
M-61	Liquid Radwaste Collection
M-87	Drywell Chilled Water
M-90	Control Structure Chilled Water

IST Program Plan
Limerick Unit 1 & 2

ATTACHMENT 2

PUMP RELIEF REQUEST INDEX

Relief Request No.	Description	NRC Approval Date
GPRR-1	- Deleted -	
GPRR-2	- Deleted -	
GPRR-3	- Deleted -	
GPRR-4	- Deleted -	
GPRR-5 Rev.0	Use of Code Case OMN-6 Alternative Rules for Digital Instruments	November 17, 2009
11-PRR-1 Rev.1	ESW Pump Test Using Pump Curves Rev 1 updates Code Paragraph references and includes Comprehensive Pump Testing.	November 17, 2009
90-PRR-1 Rev.1	Installed Pump Instrumentation greater than 2% Rev 1 updates Code Paragraph references. Circumstances and basis for previous NRC approval have not changed.	November 17, 2009

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. GPRR-5, Revision 0

Use of Code Case OMN-6
Alternative Rules for Digital Instruments

Proposed Alternative
in Accordance with 10 CFR 50.55a(a)(3)(i)
--Alternative Provides Acceptable Level of Quality and Safety--

ASME Code Components Affected :

All ASME Code Class 2 & 3 Pumps, except skid mounted, in the scope of the Limerick IST Program.

Applicable Code Edition:

The applicable code edition is the ASME OM Code, 2004 Edition. The new interval begins on January 8, 2010, and will conclude on January 7, 2020.

Applicable Code Requirement(s):

Paragraph ISTB 3510(b)(2) requires that the reference value does not exceed 70% of the calibrated range for digital instruments. ISTB-3510(b)(2), "digital instruments shall be selected such that the reference value does not exceed 70% of the calibrated range of the instrument."

Reason For Request:

Pursuant to 10 CFR 50.55a, "Codes and Standards," paragraph (a)(3)(i), relief is requested from the requirement of ASME OM Code ISTB-3510(b)(2). This request is to allow the use of ASME Code Case OMN-6, "Alternate Rules for Digital Instruments."

Code Case OMN-6 allows the use of digital instruments where the reference value does not exceed 90% of the calibrated range of the instrument. Code Case OMN-6 applies only to the 1990 Edition through the 1997 Addenda. LGS, Units 1 and 2 will implement the 2004 Edition of the ASME OM Code for it's third 10-year Interval and intends to use this Code Case.

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. GPRR-5, Revision 0 (cont.)

Proposed Alternative and Basis for Use:

OMN-6 allows reading up to 90% of the calibrated range of the instrument versus the referenced applicable requirement of 70% from the ASME OM Code, 2004 Edition, Paragraph ISTB-3510(b)(2). OMN-6 permits the use of a greater usable range of the permanently installed instruments at LGS, Units 1 and 2.

NUREG-1482, Revision 1, Section 5.5 states that....."The NRC has accepted Code Case OMN-6 as specified in Regulatory Guide 1.192, which allows each digital instrument to be such that the reference values do not exceed 90 percent of the calibrated range of the instrument."

Use of Code Case OMN-6, approved by the NRC in Regulatory Guide 1.192, will provide at least equivalent instrumentation accuracy requirements for the required pump testing parameters to be measured in the IST program and will provide results consistent with code requirements. This will provide adequate assurance of acceptable pump performance.

Using the provisions of this relief request as an alternative to the specific requirements of ISTB-3510(b)(2) identified above will provide adequate indication of pump performance and continue to provide an acceptable level of quality and safety. Therefore, pursuant to 10 CFR 50.55a(a)(3)(i) relief is requested from the specific ISTB requirements identified in this request.

Duration of Proposed Alternative:

The third ten-year interval for LGS, Units 1 and 2 begins on January 8, 2010 and will conclude on January 7, 2020.

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. GPRR-5, Revision 0 (cont.)

Precedents:

1. Letter from H. Chernoff (U. S. Nuclear Regulatory Commission) to D. Christian (Dominion Nuclear Connecticut, Inc.), "Millstone Power Station, Units 2 and 3-Relief Requests for the Fourth 10-Year and Third 10-Year Pump and Valve Inservice Testing Programs, (TAC NOS. MD7763 THROUGH MD7771)," dated October 24, 2008 (Pump Relief Request P-002)

2. Letter from D. Terao (U. S. Nuclear Regulatory Commission) to J. Keenan (Pacific Gas and Electric Company), "Diablo Canyon Power Plant, Unit Nos. 1 and 2 - Approval of Relief Requests P-RR1, P-RR2, AND P-RR3 For the Third 10-Year Pump and Valve Inservice Testing Program Interval (TAC NOS. MC6632 AND MC6633)," dated January 30, 2006 (Pump Relief Request P-RR3)

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. 11-PRR-1, REVISION 1
Use of Code Case OMN-16
ESW Pump Test Using Pump Curves

Rev 1 updates Code Paragraph references
and includes Comprehensive Pump Testing.

Proposed Alternative
in Accordance with 10 CFR 50.55a(a)(3)(i)
--Alternative Provides Acceptable Level of Quality and Safety--

ASME Code Components Affected :

Pump(s):	Emergency Service Water	0AP548	0CP548
		0BP548	0DP548
Type:	Vertical Line Shaft		
Driver:	Motor		
Group:	A		
Code Class:	3		

Applicable Code Edition: The applicable code edition is the ASME OM Code, 2004 Edition. The new interval is scheduled to begin on January 8, 2010 and conclude on January 7, 2020.

Applicable Code Requirement(s): ISTB-5221and 5223 require inservice testing to be conducted with the pump operating at specified test reference conditions. Further, ISTB-5221(b) and 5223(b) require the resistance of the system be varied until the flow rate or differential pressure equals its reference value, at which point the other parameter (differential pressure or flow rate) be determined and compared to its reference value.

Reason For Request: Pursuant to 10 CFR 50.55a, "Codes and Standards," paragraph (a)(3)(i), relief is requested to use Code Case OMN-16, "Use of a Pump Curve for Testing," which is not included in Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code," dated June 2003.

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. 11-PRR-1, REVISION 1 (cont.)

The Emergency Service Water (ESW) System includes a large number of variable heat loads. In addition, the temperature of the system is seasonally dependent and can vary significantly. Therefore, it is extremely difficult to vary the resistance of the system to establish flow or differential pressure conditions at any fixed reference point. Operations personnel would need to assume local manual control of automatic room cooler valves and equipment modulating valves. This requires access to Emergency Core Cooling System (ECCS) room coolers and other safety related equipment causing numerous entries into Radiological Controlled Areas (RCAs) to adjust flow to a fixed reference point in order to perform this quarterly test, which will also result in additional dose.

Establishment of multiple sets of reference values would not improve the capability to set either variable at a fixed point.

IST of these pumps has used reference curves during the preceding Ten Year Intervals.

Proposed Alternative and Basis for Use:

In order to monitor the ESW pumps for degradation and assure their operational readiness, reference curves as described in Code Case OMN-16 will be used for inservice testing. Pump testing is performed quarterly using these pump curves. Flow, normally in the range of 3000 to 4100 gpm, is measured and total dynamic head is calculated from the pump discharge pressure and the level of the Spray Pond (i.e., suction). The test point is then compared to the pump curve and determined to be within the acceptance range of Table ISTB-5221-1 (0.95 to 1.10 P_r for Group A Test or 0.95 to 1.03 P_r for Comprehensive Test), which is also plotted on the pump curve. Corrective action, if required, shall meet the requirements of ISTB-6200.

These pump curves were prepared during flow balancing activities shortly before commercial operation of LGS, Unit 2. They include many empirical data points taken over the entire operating range of the pumps, essentially from shutoff head to approximately 1.5 times the maximum flow required for safe shutdown or accident mitigation. Manufacturer's representatives witnessed and concurred with the development of these curves. These curves exceed the requirements of OMN-16 for a minimum of 3 data points and at least one data point for each 20% of the maximum pump curve range for the portion of the maximum pump curve established by the reference curve

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. 11-PRR-1, REVISION 1 (cont.)

Vibration readings are taken in accordance with ISTB-3540. In addition to the Code required vibration readings, several additional readings are taken and analyzed in accordance with the LGS Predictive Maintenance Program. Since these pumps show little variation in vibration over their normal operating range, the acceptance criteria for vibration testing complies with the requirements of Table ISTB 5221-1.

The Reference pump curves for inservice testing are considered acceptable in meeting the intent of the ASME O&M Code-2004 Paragraphs ISTB 5221 and 5223.

Duration of Proposed Alternative:

Duration will be for the third ten-year interval for LGS, Units 1 and 2, which is scheduled to begin on January 8, 2010 and conclude on January 7, 2020.

Precedents:

1. Letter from T. Hiltz (U.S. Nuclear Regulatory Commission) to Vice President of Operations (Arkansas Nuclear One, Entergy Operations, Inc), "Arkansas Nuclear One, Unit No. 1 - Approval of Relief Request for Arkansas Nuclear One Unit 1 Fourth 10-Year Pump and Valve Inservice Testing Program (TAC NOS. MD7709 and MD7710)," dated April 30, 2008

2. Letter from J. Clifford (U. S. Nuclear Regulatory Commission) to J. Hutton (PECO Energy Company), "Second 10-Year Interval Pump and Valve Inservice Testing Program Relief Requests Nos. 90-PRR-1, Revision 0; GPRR-3, Revision 2; 11-PRR-1, Revision 0; GVRR-4, Revision 2; GVRR-5, Revision 2; 20-VRR-1, Revision 2; and 41-VRR-6, Revision 0, for Limerick Generating Station, Units 1 and 2 (TAC NOS. MA8077 and MA8079)," dated November 28, 2000.

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. 90-PRR-1, REVISION 1

Installed Pump Instrumentation greater than 2%

Circumstances and basis for previous NRC approval have not changed.
Rev 1 updates Code Paragraph references.

Proposed Alternative
in Accordance with 10 CFR 50.55a(a)(3)(i)
--Alternative Provides Acceptable Level of Quality and Safety--

ASME Code Components Affected :

Pump(s):	Main Control Room	0AP162
	Chilled Water	0BP162
Type:	Centrifugal	
Driver:	Motor	
Group:	B	
Code Class:	3	

Applicable Code Edition: The applicable code edition is the ASME OM Code, 2004 Edition. The new interval begins on January 8, 2010, and will conclude on January 7, 2020.

Applicable Code Requirement(s): Paragraph ISTB-3510(a) requires that instrument accuracy be within the limits of Table 3510-1, which specifies an accuracy requirement of ±2% of full-scale for analog flow instruments. Paragraph ISTB- 3510(b)(1) requires that the full-scale range of each analog instrument be not greater than three times the reference value.

Reason For Request: Pursuant to 10 CFR 50.55a, "Codes and Standards," paragraph (a)(3)(i), relief is requested from the requirement of ASME OM Code ISTB-3510(a). For instruments to be in compliance with the Code, both requirements stated above must be met, individually, for each instrument. The combination of the two requirements (i.e., accuracy equal to ±2% of full-scale and full scale being up to 3 times the reference value) yields a permissible inaccuracy of ±6% of the reference value.
The permanently installed flow instruments shown in the table below are calibrated to an accuracy that exceeds the ±2% of full-scale limit.

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. 90-PRR-1, REVISION 1 (cont)

Proposed Alternative and Basis for Use:

As a proposed alternative, LGS, Units 1 and 2 propose to use the currently installed analog instruments for measurement of flow for the identified equipment. Although these instruments do not meet Code requirements, they provide better indication accuracy at the reference value than that which is permitted by the Code.

Section 5.5.1 of NUREG 1482, Revision 1, states that the staff may grant relief when the combination of the range and accuracy yields a reading at least equivalent to the reading achieved from instruments that meet the Code requirements (i.e., up to ±6 percent).

The following table shows the instrument accuracy and full scale range of the flow instruments used to conduct inservice testing of the pumps listed above. The resulting instrument tolerance and indicated accuracy are calculated and also listed in the Table. The indicated accuracy at the reference value is shown to be within the required 6 percent.

INSTRUMENT NUMBER	REFERENCE VALUE	INSTRUMENT RANGE	INSTRUMENT ACCURACY	INSTRUMENT TOLERANCE	INDICATED ACCURACY
FI-90-034A	600	0 - 800	3.08%	24.64	4.11%
FI-90-034B	600	0 - 800	3.04%	24.32	4.05%

Based on Section 5.5.1 of NUREG 1482 and the information provided herein, the existing permanently installed pump instrumentation is considered acceptable in meeting the intent of the ASME O&M Code-2004 Paragraphs ISTB 3510(a) and 3510(b)(1).

Duration of Proposed Alternative:

The third ten-year interval for LGS, Units 1 and 2 begins on January 8, 2010 and will conclude on January 7, 2020.

ATTACHMENT 3

PUMP RELIEF REQUESTS

RELIEF REQUEST NO. 90-PRR-1, REVISION 1 (cont)

Precedents:

1. Letter from T. Boyce (U. S. Nuclear Regulatory Commission) to R. Duncan II (Carolina Power & Light Company), "Shearon Harris Nuclear Plant, Unit 1 – Relief Request AF-PR-1 for the Third 10-Year Inservice Inspection Interval (TAC NO. MD3894)," dated July 16, 2007 (Relief Request AF-PR-1)

2. Letter from H. Chernoff (U. S. Nuclear Regulatory Commission) to W. Levis (PSEG Nuclear LLC), "Safety Evaluation of Relief Requests for the Third 10-Year Interval of the Inservice Testing Program for Hope Creek Generating Station (TAC NOS. MD3300, MD3301, MD3337, MD3338, MD3353, AND MD3354)," dated April 5, 2007 (P-01)

3. Letter from J. Clifford (U. S. Nuclear Regulatory Commission) to J. Hutton (PECO Energy Company), "Second 10-Year Interval Pump and Valve Inservice Testing Program Relief Requests Nos. 90-PRR-1, Revision 0; GPRR-3, Revision 2; 11-PRR-1, Revision 0; GVRR-4, Revision 2; GVRR-5, Revision 2; 20-VRR-1, Revision 2; and 41-VRR-6, Revision 0, for Limerick Generating Station, Units 1 and 2 (TAC NOS. MA8077 and MA8079)," dated November 28, 2000

IST Program Plan
Limerick Unit 1 & 2

ATTACHMENT 4

VALVE RELIEF REQUEST INDEX

Relief Request No.	Description	NRC Approval Date
GVRR-1	- Deleted -	
GVRR-2	- Deleted -	
GVRR-3	- Deleted -	
GVRR-4	- Deleted -	
GVRR-5.	- Deleted -	
GVRR-6	- Deleted -	
GVRR-7	- Deleted -	
41-VRR-1	- Deleted -	
41-VRR-2	- Deleted -	
41-VRR-3	- Deleted -	
41-VRR-4	- Deleted -	
41-VRR-5	- Deleted -	
41-VRR-6	- Deleted -	
43-VRR-1	- Deleted -	
46-VRR-1	- Deleted -	
47-VRR-1	- Deleted –	
47-VRR-2 Rev.0	Control Rod Drive Scram Valves	November 17, 2009
48-VRR-1	- Deleted -	
49-VRR-1	- Deleted -	
51-VRR-1	- Deleted -	
51-VRR-2	- Deleted -	
52-VRR-1	- Deleted -	
55-VRR-1	- Deleted -	
55-VRR-2	- Deleted -	
59-VRR-1	- Deleted -	

ATTACHMENT 5

VALVE RELIEF REQUESTS

RELIEF REQUEST NO. 47-VRR-2, REVISION 0

Control Rod Drive Scram Valves

Proposed Alternative
in Accordance with 10 CFR 50.55a(a)(3)(i)
--Alternative Provides Acceptable Level of Quality and Safety—

ASME Code Components Affected:

Valves: Inlet and Outlet Scram Valves
XV-47-1-26 (all 185 HCUs) XV-47-2-26 (all 185 HCUs)
XV-47-1-27 (all 185 HCUs) XV-47-2-27 (all 185 HCUs)

Category: B
Type: Air Operated

Valves: Scram Discharge Riser Check Valve
47-1-14 (all 85 HCUs) 47-2-14 (all 185 HCUs)

Category: C
Type: Self-Actuated

Code Class: 2

Applicable Code Edition: The applicable code edition is the ASME OM Code, 2004 Edition. The new interval begins on January 8, 2010, and will conclude on January 7, 2020.

Applicable Code Requirement(s): Relief is requested from the following requirements:

ISTC-3510 requires that active Category B valves shall be exercised nominally every three months, except as provided by ISTC-3520, ISTC- 3540, ISTC-3550, ISTC-3570, ISTC-5221, and ISTC-5222.

ISTC-3560 requires valves with fail safe actuators be tested by observing the operation of the actuator upon loss of valve actuating power in accordance with the exercising frequency of ISTC-3510.

ISTC-5131(a) requires that active valves shall have their stroke time measured when exercised in accordance with ISTC-3500.

ATTACHMENT 5

VALVE RELIEF REQUESTS

RELIEF REQUEST NO. 47-VRR-2, REVISION 0 (cont.)

ISTC-3510 requires that active Category C check valves shall be exercised nominally every three months, except as provided by ISTC-3520, ISTC- 3540, ISTC-3550, ISTC-3570, ISTC-5221, and ISTC-5222.

ISTC-5221(a)(2) requires check valves [47-1(2)-14] that have a safety function in only the open direction shall be exercised by initiating flow and observing that the obturator has traveled to either the full open position or to the position required to perform its intended function(s), and verify closure

Reason For Request:

Pursuant to 10 CFR 50.55a, "Codes and Standards," paragraph (a)(3)(i), relief is request to use the guidance provided in Generic Letter 89-04, Position 7. Generic Letter 89-04, Position 7 discusses alternative testing of individual scram valves for control rods in Boiling Water Reactors. Position 7 states that use of these alternatives to satisfy valve testing requirements should be documented in the IST Program. NUREG-1482, Revision 1, Section 1.3, states that specific relief is required to implement the positions of Generic Letter 89-04.

Proposed Alternative and Basis for Use:

Each of the valves listed above represents 1 of 185 CRD Hydraulic Control Unit (HCU) valves. In order to exercise the Category B valves in accordance with ISTC-3510, and test the fail safe actuators as required by ISTC-3560, the air operated inlet and outlet valves would need to be exercise tested at power nominally every three months. The air operated inlet and outlet scram valves, XV-47-1(2)-26 and XV-47-1(2)-27, open on a signal from the Reactor Protection System to permit rapid insertion of the control rods (scram). These valves can only be tested by scramming the control rod drive. Exercise testing at power will result in rapid insertion of control rods causing potential reactivity transients and wear of the control rod drive mechanisms.

Accordingly, relief is requested to test the valves in accordance with Limerick Generating Station (LGS), Units 1 and 2 Technical Specification (TS) Surveillance Requirement (SR) 4.1.3.2 ("Control Rod Maximum Scram Insertion Times"), and in conformance with Generic Letter 89-04, Position 7.
Generic Letter 89-04 is discussed in NUREG-1482, Revision 1 ('Guidelines for Inservice Testing at Nuclear Power Plants"):
"The recommendations herein supplement the guidance and technical positions in GL 89-04. Note that specific relief is required to implement the guidance in GL 89-04.

ATTACHMENT 5

VALVE RELIEF REQUESTS

RELIEF REQUEST NO. 47-VRR-2, REVISION 0 (cont.)

However, relief justification may refer to the positions in the GL with clarifying information to clearly show how it would apply to a licensees situation."

As a proposed alternative, the valve testing will be performed in accordance with the TS SR 4.1.3.2.

ISTC-5131(a) applies to the Category B air operated inlet and outlet scram valves (XV-47-1(2)-26 and XV-47-1(2)-27). Stroke timing of the air-operated valves is impractical since they are not equipped with indication of the open and closed positions. Insertion of the control rod is verified by control room panel lights and not valve position. Accordingly, code compliant stroke time testing cannot be performed to meet the ISTC-5131(a) requirement. As a proposed alternative, scram time testing as described in GL 89-04, Position 7 will be performed in accordance with LGS, Units 1 and 2 TS SR 4.1.3.2.

ISTC-3510 and ISTC-5221(a)(2) apply to the scram discharge riser check valves. The scram discharge riser check valve 47-1(2)-14 is flow actuated as a result of XV-47-1(2)-27 opening. These valves can only be tested by scramming the control rod drive in order to demonstrate that the safety function is exercised. Exercise testing at power will result in rapid insertion of control rods causing potential reactivity transients and wear of the control rod drive mechanisms. Testing will be performed in accordance with LGS, Units 1 and 2 TS SR 4.1.3.2.

Duration of Proposed Alternative: Duration will be for the third ten-year interval for LGS, Units 1 and 2, which is scheduled to begin on January 8, 2010 and conclude on January 7, 2020.

Precedents: None

IST Program Plan
Limerick Unit 1 & 2

ATTACHMENT 6

COLD SHUTDOWN JUSTIFICATION INDEX

Cold Shutdown Justification No.	Description
01-VCS-1 Rev.2	Main steam supply isolation to the Steam Jet Air Ejectors (SJAE)
01-VCS-2 Rev.2	Main steam supply isolation to the steam seal evaporator
01-VCS-3 Rev.1	Main Stm. To RFPT & Recombiner Heater (Feed Turb/Recombiner) Main Stm. To Hotwell Stm. Spargers
13-VCS-1 Rev.2	Cooling water to reactor recirculation pump seal and motor oil coolers, primary containment isolation.
40-VCS-1	- Deleted -
41-VCS-1 Rev.2	Feedwater System outside primary containment isolation valves
41-VCS-2 Rev.4	Main steam line inside/outside primary containment isolation valves
41-VCS-3 Rev.2	Safeguard Piping Fill System seal water injection to feedwater and primary containment isolation valves
41-VCS-4 Rev.2	Safeguard Piping Fill System seal water injection to feedwater primary containment isolation valves
41-VCS-5 Rev.2	Outboard MSIV accumulator inlet check valves
42-VCS-1 Rev.2	Outside primary containment instrument line isolation
42-VCS-2	- Deleted -
43-VCS-1	- Deleted -
44-VCS-1 Rev.2	Reactor Water Cleanup System primary containment isolation valves
44-VCS-2 Rev.1	Reactor Water Cleanup System primary containment isolation testable check valves
46-VCS-1 Rev.4	Containment isolation of CRD cooling, charging, drive and exhaust water supply headers
46-VCS-2 Rev.2	CRD supply to Reactor Recirculation Pump seal purge line
47-VCS-1 Rev.3	Scram accumulator charging water line check valves
49-VCS-1 Rev.2	RCIC steam supply; inboard primary containment isolation valve

IST Program Plan
Limerick Unit 1 & 2

ATTACHMENT 6

COLD SHUTDOWN JUSTIFICATION INDEX

Cold Shutdown Justification No.	Description
49-VCS-2	- Deleted –
49-VCS-3 Rev.2	RCIC Turbine Vacuum Pump discharge to the Suppression Pool and containment isolation check valves
49-VCS-4 Rev.2	Condensate transfer to RCIC Pump discharge stay - fill check valves
51-VCS-1 Rev.3	Low Pressure Coolant Injection and Shutdown Cooling return containment isolation valves and Reactor Coolant Pressure Boundary (RCPB) isolation valves
51-VCS-2 Rev.2	RHR Shutdown Cooling supply inside/outside primary containment isolation and Reactor Coolant Pressure Boundary (RCPB) isolation valves
52-VCS-1 Rev.2	Primary containment isolation, Reactor Coolant Pressure Boundary isolation
55-VCS-1 Rev.3	HPCI steam supply; inboard primary containment isolation valve
55-VCS-2	- Deleted -
55-VCS-3 Rev 0	HPCI Turbine Exhaust Line Stop/Check Valve
59-VCS-1 Rev.2	PCIG Compressor suction outside containment isolation valves
59-VCS-2 Rev.1	PCIG Compressor suction inside containment isolation valves
87-VCS-1 Rev.2	DWCW cooling water inboard/outboard containment isolation valves

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 01-VCS-1, REVISION 2

System: Main Steam

Valve(s): HV-01-150 HV-01-250

Category: B

Type: Motor Operated

Function: Main steam supply isolation to the Steam Jet Air Ejectors (SJAE)

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the closed position.

Cold Shutdown Test Justification: These valves serve as the main steam supply isolation valves to the SJAE. They are required to close in order to establish isolation of the MSIV Leakage Alternate Drain Pathway and to prevent the possible blowdown of steam entrained in the Main Steam Header in the event of a loss of non-safety related portions of the system. During normal operation, the SJAE is used to remove non-condensable gases and maintain a vacuum on the main condenser. Failure of the valve in any position other than open would result in a loss of condenser vacuum and a subsequent plant trip. The mechanical vacuum pumps, which are used during start-up, are unsuitable for use during power operation due to their marginal performance in removing hydrogen from the condenser and in filtering gases prior to exhausting to the atmosphere.
In addition to a loss of the SJAE, valve exercising would also cause a loss of dilution steam flow to the off gas system.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 01-VCS-2, REVISION 2

System: Main Steam

Valve(s): HV-01-111 HV-01-211

Category: B

Type: Motor Operated

Function: Main steam supply isolation to the steam seal evaporator.

Deferred Testing: ISTC-3510 & 5121: Quarterly xercise and stroke time to the closed position.

Cold Shutdown Test Justification: These valves serve as the main steam supply isolation valves to the steam seal evaporators. They are required to close in order to establish isolation of the MSIV Leakage Alternate Drain Pathway and to prevent the possible blowdown of steam entrained in the Main Steam Header in the event of a loss of non-safety related portions of the system. Failure of these valves to reopen during normal operation could result in a turbine steam seal loss with subsequent damage to the seals. Loss of these seals would allow steam from the reactor to be admitted into the Turbine Building atmosphere, resulting in a potential airborne contamination problem. Also, loss of the steam seals could cause a loss of condenser vacuum, resulting in a plant trip.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 01-VCS-3, REVISION 1

System: Main Steam

Valve(s): HV-01-108 HV-01-208
HV-01-109 HV-01-209

Category: B

Type: Motor Operated

Function: Main Stm. To RFPT & Recombiner Heater (Feed Turb/Recombiner)
Main Stm. To Hotwell Stm. Spargers

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the closed position.

Cold Shutdown Test Justification: These valves are located in the main steam supply lines to the reactor feed pump turbine and Gaseous Radwaste Preheater, and the condenser hotwell spargers. They are required to close in order to establish isolation of the MSIV Leakage Alternate Drain Pathway.

Closure of the RFPT supply valve results in loss of HP steam and loss of main steam to the Gaseous Radwaste Preheater. The RFPTs are normally supplied by an alternate steam source during normal power operation. However, the Gaseous Radwaste Preheater is required to remain in service during normal plant operation to insure proper recombiner operation. Closure of the isolation valve to the Gaseous Radwaste Preheater causes a loss of offgas heating steam, which could lead to the generation potentially combustible concentrations of hydrogen at the outlet of the recombiner.

Opening of the supply for the hotwell spargers will cause a hotwell level and reactor level and power transient since the position of the down stream control valves cannot be verified (no indication). A failure of a hotwell sparger control valves to provide isolation or a loss of instrument air will provide a direct flow path from the Main Steam header to the Main Condenser.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 01-VCS-3, REVISION 1(cont.)

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 13-VCS-1, REVISION 2

System: Reactor Enclosure Cooling Water

Valve(s):

HV-13-106	HV-13-206
HV-13-107	HV-13-207
HV-13-108	HV-13-208
HV-13-111	HV-13-211

Category: A

Type: Motor Operated

Function: Cooling water to reactor recirculation pump seal and motor oil coolers, primary containment isolation.

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the closed position.

Cold Shutdown Test Justification: Exercising these valves during power operation would cause loss of cooling water flow to the reactor recirculation pump seals and motor oil coolers. The failure of any one of these valves to reopen would result in an inadequate cooling water supply with possible subsequent damage to the pump seals and motor. A damaged pump or motor would require shutdown and de-inerting of the primary containment. Repairs would be very costly in terms of manpower and material requirements, personnel exposure and lost production.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 40-VCS-1

- DELETED -

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 41-VCS-1, REVISION 2

System: Nuclear Boiler

Valve(s): HV-41-1F074A, B HV-41-2F074A, B

Category: A/C

Function: Feedwater System outside primary containment isolation valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position.

Cold Shutdown Test Justification: Valves HV-41-1(2)F074A,B function as check valves in fulfillment of their safety function (i.e., containment isolation). In order to test these valves during power operation, the feedwater loop in which they are located would need to be isolated. Because both feedwater loops are required for full power operation, isolation of one loop for testing would require a significant reduction in power and could result in a reactor scram due to low feedwater flow. NUREG 1482, Section 2.4.5 recognizes these conditions as proper justification for testing deferral. Furthermore, the elevated temperature and pressure of the feedwater in this part of the system pose significant personnel safety concerns. Finally, isolation of the loop and subsequent restarting could result in thermal shock and crud burst situations.

Cold Shutdown Testing: Exercise to the closed position in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 41-VCS-2, REVISION 4

System: Nuclear Boiler

Valve(s): HV-41-1F022A, B, C, D HV-41-2F022A, B, C, D
HV-41-1F028A, B, C, D HV-41-2F028A, B, C, D

Category: A

Type: Air Operated

Function: Main steam line inside/outside primary containment isolation valves.

Deferred Testing: ISTC-3510, 3560 & 5131: Quarterly exercise, stroke time, and fail-safe test to the closed position.

Cold Shutdown Test Justification: Full stroke exercising of these valves during normal operation requires isolating one of the four main steam lines. Isolation of these lines results in reactor power fluctuations, primary system pressure spikes, and increased flow in the non-isolated steam lines. This unstable operating condition could lead to reactor scram or increase the chances of main steam relief valve actuation as discussed in NUREG-0626. Section 2.4.5 of NUREG 1482 recognizes testing that could cause a plant trip or require a power reduction as valid justifications for deferral.

Quarterly Partial Stroke Testing: Partial stroke testing will not be performed quarterly in accordance with ISTC-3521(b). In Section 4.2.6 (note 4) of NUREG 1482 Rev 1, the NRC advised that the revised standard technical specifications bases for MSIV surveillance requirements discourages MSIV testing at power, including part-stroke exercising.
Partial stroke exercise testing increases the risk of a valve closure when the unit is generating power. This concern was realized on LGS Unit-1 on 5/21/96 when performing a partial closure test of the 'B' inboard MSIV (HV-041-1F022B) via ST-2-041-619-1 resulted in a full closure of the MSIV and a reactor trip on high pressure.

Cold Shutdown Testing: Exercise, stroke time, and fail-safe test to the closed position in accordance with ISTC-3521(b) & ISTC-5131 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 41-VCS-3, REVISION 2

System:	Nuclear Boiler	
Valve(s):	HV-41-130A, B HV-41-133A, B	HV-41-230A, B HV-41-233A, B
Category:	A	
Type:	Motor Operated	
Function:	Safeguard Piping Fill System seal water injection to feedwater and primary containment isolation valves.	
Deferred Testing:	ISTC-3510 & 5121: Quarterly exercise and stroke time to the open and closed positions.	
Cold Shutdown Test Justification:	These valves and downstream check valves 41-1036A/B and 41-2036A/B serve as an isolation barrier between high pressure Feedwater and low pressure Safeguard Piping Fill System piping. Exercising these valves open quarterly could over-pressurize the low pressure piping in the event that the downstream check valves were not fully seated.	
Quarterly Partial Stroke Testing:	Partial stroke testing cannot be performed due to the over-pressure concerns described above. In addition, valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.	
Cold Shutdown Testing:	Exercise and stroke timing to the open and closed positions in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).	

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 41-VCS-4, REVISION 2

System: Nuclear Boiler

Valve(s): 41-1036A, B 41-2036A, B

Category: A/C

Function: Safeguard Piping Fill System (SPFS) seal water injection to feedwater primary containment isolation valves.

Deferred Testing: ISTC-3510 & 5221(a)(1): Quarterly exercise to the open and closed positions

Cold Shutdown Test Justification: Forward flow operability is verified by injecting water from the Safeguard Piping Fill System into the Feedwater System. During power operation, the SPFS pumps are incapable of overcoming the pressure in the Feedwater System. Exercising in the forward direction can only be performed when Feedwater System pressure is low enough to allow injection from the Safeguard Piping Fill System.

Exercising in the reverse direction is accomplished by venting off the upstream side of the valve with pressure applied to the downstream side. At power, the downstream side of the check valve is exposed to high energy and radioactive feedwater. Venting the upstream side with a subsequent failure of the check valve to close would pose a safety hazard to personnel and a possible release of radioactivity. In addition, entry into the steam tunnel would be required for venting the upstream side. During normal operation the steam tunnel is a high temperature/high radiation area, limiting access to emergencies only. Therefore, exercising in the reverse direction will be performed when conditions are less hostile.

Cold Shutdown Testing: Exercise to the open and closed positions in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 41-VCS-5, REVISION 2

System: Nuclear Boiler

Valve(s): 41-2F029A, B, C, D

Category: C

Function: Outboard MSIV accumulator inlet check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position and bidirectional test open

Cold Shutdown Test Justification: Reverse exercising of these valves would require isolating and venting the associated compressed air supply header and observing the accumulator pressure. Since pressure indication is not provided for the accumulators, a temporary pressure gauge must be installed on a test connection which is located inside the steam tunnel. The steam tunnel is a high temperature and high radiation area during power operation, limiting access to emergencies only.

Cold Shutdown Testing: Exercise to the closed position and bidirectional test open in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown except as specified in ISTC-3522(e)..

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 42-VCS-1, REVISION 2

System: Nuclear Boiler Vessel Instrumentation

Valve(s): HV-42-147A, B, C, D HV-42-247A, B, C, D

Category: B

Type: Motor Operated

Function: Outside primary containment instrument line isolation.

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the closed position.

Cold Shutdown Test Justification: The function of these valves is to isolate instrument lines outside primary containment in the event of a line break. Also, these valves are required to be open during post accident conditions in order to monitor drywell pressure.
Exercising these valves at power could result in a plant trip as the result of relatively small pressure fluctuations in the instrument lines. In addition, failure of these valves to reopen following testing would isolate multiple safety related instruments used for the Reactor Protection and Emergency Core Cooling Systems (i.e., drywell pressure). Because these instruments are required by technical specifications to be operable, loss of instrumentation due to isolation would force a plant shutdown.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 42-VCS-2

- DELETED -

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 43-VCS-1

- DELETED -

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 44-VCS-1, REVISION 2

System: Reactor Water Cleanup (RWCU)

Valve(s): HV-44-1F001 HV-44-2F001
HV-44-1F004 HV-44-2F004

Category: A

Type: Motor Operated

Function: Reactor Water Cleanup System primary containment isolation valves.

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the closed position.

Cold Shutdown Test Justification: The RWCU system is required during all normal operating modes in order to maintain water chemistry within the limits specified in Technical Specification 3.4.4.

The RWCU pumps are interlocked to trip upon the closure of either F001 or F004. A pump trip causes a loss in cooling water to the mechanical seal resulting in a high seal temperature and possible failure. A seal failure would delay RWCU system start-up and would limit the ability of the system to maintain plant chemistry within the required limits.

HV-44-1(2)F001 are located inside the primary containment and are inaccessible during power operation due to high radiation levels and the inerted atmosphere. Failure in the closed position would result in a complete loss of the RWCU system. Interruption in the operation of the RWCU system has been known to result in resin breakdown and intrusion into the Reactor Vessel at other BWR facilities.

Quarterly Partial stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Furthermore, the RWCU Pump will trip if the valves are not fully open. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN JUSTIFICATION NO. 44-VCS-2, REVISION 1

System: Reactor Water Cleanup (RWCU)

Valves: HV-44-1F039 HV-44-2F039

Category: A/C

Function: Reactor Water Cleanup System primary containment isolation testable check valves.

Deferred Testing: ISTC-3510 &5221(a)(3): Quarterly exercise to the closed position.

Cold Shutdown Justification: Reactor coolant water chemistry control is provided in part by the RWCU system and is required during all normal operating modes. Failure to maintain water chemistry would violate Technical Specification 3.4.4 resulting in a forced shutdown of the reactor.

Reverse exercising of HV-44-1(2)F039 during normal operation would require closing of F001 or F004 since the assisting air operator is not designed for valve closure against normal RWCU Pump discharge pressure. Closing either F001 or F004 would result in an RWCU Pump trip which would cause a loss of cooling water to the mechanical seal which in turn could result in high seal temperature and possible failure. A seal failure would delay RWCU system start-up and would significantly reduce the ability to maintain plant chemistry within the required Technical Specification limits. In addition, HV-44-1(2)F001 are located inside the primary containment which is inaccessible during power operation due to high radiation levels and the inerted atmosphere. Failure in the closed position would result in a complete loss of the RWCU system.
Primary containment must be de-inerted in order to perform the lineup for performance of the full-closure test.

Cold Shutdown Testing: Exercise to the closed position in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown when primary containment is de-inerted except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 46-VCS-1, REVISION 4

System: Control Rod Drive Hydraulic - Part A

Valve(s):

46-1101	46-1115	46-2101	46-2115
46-1102	46-1116	46-2102	46-2116
46-1108	46-1122	46-2108	46-2122
46-1109	46-1123	46-2109	46-2123

Category: A/C

Function: Containment isolation of CRD cooling, charging, drive and exhaust water supply headers.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position(all valves) and bidirectional test open(except 46-*115 & 46-*116).

Cold Shutdown Test Justification: Verification of reverse flow closure requires securing the CRD system Drive Water pumps which would result in an interruption in flow to CRD system loads. These include cooling water to the CRD's, drive water to the CRD's, charging water to the CRD accumulators, purge and sealing water to the Reactor Recirc pumps, and backfill to the Reactor Vessel level instrumentation reference leg. Testing of these valves at power involves several risks including plant trips, ECCS/ESF system initiation, and component damage.

Cold Shutdown Testing: Exercise to the closed position and bidirectional test open in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown when securing the CRD pumps except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 46-VCS-2, REVISION 2

System: Control Rod Drive Hydraulic - Part A

Valve(s): HV-046-127, HV-046-227
HV-046-128, HV-046-228

Category: B

Type: Motor Operated

Function: CRD supply to Reactor Recirculation Pump seal purge line.

Deferred Testing: ISTC-3510 & 5121 : Quarterly exercise and stroke time to the closed position.

Cold Shutdown Test Justification: Exercising these valves during normal plant operation would interrupt the supply of purge water to the Reactor Recirc Pump seals. Damage to the seals would increase the possibility of drywell leakage which could result in a forced plant shutdown, placing unnecessary thermal fatigue cycles on RPV nozzles and supports.
Successful Recirculation pump operation depends upon a reliable source of cool, clean seal water. Even if there is no immediate damage, the temporary interruption of seal water flow resulting from the quarterly testing of these valves would result in pressure and temperature transients that adversely affect seal life. Additional seal maintenance results in increased radiological exposure to personnel, which is contrary to the objectives of the "ALARA" Program.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 47-VCS-1, REVISION 3

System: Control Rod Drive Hydraulic - Part B

Valve(s): 47-1-15 (all 185 HCUs)
47-2-15 (all 185 HCUs)

Category: A/C

Function: Scram accumulator charging water line check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position and bidirectional test open.

Cold Shutdown Test Justification: Verification of reverse flow closure requires securing the CRD system Drive Water pumps and monitoring each individual accumulator pressure and alarm to verify that the valves have closed on reverse flow. Stopping the pumps during operation would result in an interruption of flow to CRD system loads, including cooling water to the CRD's, drive water to the CRD's, charging water to the CRD accumulators, purge and sealing water to the Reactor Recirc pumps, and backfill to the Reactor Vessel level instrumentation reference leg. Testing of these valves at power involves several risks including plant trips, ECCS/ESF system initiation, and component damage.

Cold Shutdown Testing: Exercise to the closed position and bidirectional test open in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown when securing the CRD pumps except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 49-VCS-1, REVISION 2

System: Reactor Core Isolation Cooling

Valve(s): HV-49-1F007, HV-49-2F007

Category: A

Type: Motor Operated

Function: RCIC steam supply; inboard primary containment isolation valve.

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the open and closed positions.

Cold Shutdown Test Justification: These valves are normally open during power operation to provide a flow path for supply steam to the RCIC Pump turbine. They are located inside primary containment and are therefore not accessible during operation, since it is inerted with nitrogen and is a high radiation area. If the valve failed in the closed position during exercise testing, a complete loss of system function would result. Plant shutdown, to restore the valve to an operable status per T.S. 3.7.3a would be required.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the open and closed positions in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 49-VCS-2, REVISION 1

- DELETED -

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 49-VCS-3, REVISION 2

System: Reactor Core Isolation Cooling (RCIC)

Valve(s): 49-1F028 49-2F028

Category: A/C

Function: RCIC Turbine Vacuum Pump discharge to the Suppression Pool and containment isolation check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position.

Cold Shutdown Test Justification: Testing of these valves requires closing downstream containment isolation valves HV-49-1(2)F002 and applying pressure between HV-49-1(2)F002 and the check valves via a test connection. Opening of the test connection establishes a bypass flowpath, thus negating the containment isolation function of valves 49-1(2)F028. This alignment would be equivalent to operating with an inoperable containment isolation valve, which is recognized in NUREG-1482, Section 3.1.1, as adequate justification for deferral of testing.

Cold Shutdown Testing: Exercise to the closed position in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 49-VCS-4, REVISION 2

System: Reactor Core Isolation Cooling (RCIC)

Valve(s): 49-1F064 49-2F064
49-1F065 49-2F065

Category: C

Function: Condensate transfer to RCIC Pump discharge stay - fill check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position and bidirectional test open.

Cold Shutdown Test Justification: The above stay-fill check valves are tested in series by applying pressure downstream and observing an upstream drain connection for leakage. The upstream drain connections utilized during testing are located inside the steam tunnel. During normal operation the steam tunnel is a high temperature/high radiation area, with access limited to emergencies only. Therefore, exercising in the reverse direction will be performed at cold shutdown when access to the steam tunnel is permitted.

Cold Shutdown Testing: Exercise to the closed position and bidirectional test open in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 51-VCS-1, REVISION 3

System: Residual Heat Removal (RHR)

Valve(s):

HV-51-1F015A,B	HV-51-2F015A,B
HV-51-1F017A,B,C,D	HV-51-2F017A,B,C,D
HV-51-1F041A,B,C,D	HV-51-2F041A,B,C,D

Category: A [HV-51-1(2)F015A,B; HV-51-1(2)F017A,B,C,D]
Type: Motor Operated

Category: A/C [HV-51-1(2)F041A,B,C,D]

Function: Low Pressure Coolant Injection and Shutdown Cooling return containment isolation valves and Reactor Coolant Pressure Boundary (RCPB) isolation valves.

Deferred Testing: ISTC-3510 & 5121: Exercise and stroke time HV-51-1(2)F017A,B,C,D to the open and closed positions; HV-51-1(2)F015A,B to the closed position.

ISTC-3510 & 5221(a)(1): Exercise Category A/C valves to the open and closed positions.

Cold Shutdown Test Justification: The above valves provide the only isolation between Reactor Vessel pressure and the lower pressure RHR system piping. In each case two valves are provided, a downstream testable check valve located inside the primary containment and a motor operated valve located outside the containment. System configuration does not provide a method to ensure the downstream check valve is fully closed, therefore opening of the MOV could result in an over pressurization of the low pressure RHR piping.

The testable check valve has been provided with an equalization valve to allow testing during power using the air operator. Since the check valve is located inside the primary containment, it is inaccessible for maintenance in the event the valve fails to reclose during testing. Because Technical Specification 3.4.3.2, requires all RCPB valves be within their individual leakage limits during power operation, failure of the check valve to close would require the plant to be shutdown.

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 51-VCS-1, REVISION 3 (cont.)

Quarterly Partial Stroke Testing: None of the Category A valves in this Cold Shutdown Test Justification will be partial-stroke tested. The motor-operated valve actuators are not designed to permit part-stroke testing

Cold Shutdown Testing: Exercise and stroke time the Category A valves in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

Exercise the Category A/C valves to the open and closed positions in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 51-VCS-2, REVISION 2

System: Residual Heat Removal (RHR)

Valve(s): HV-51-1F008 HV-51-2F008
HV-51-1F009 HV-51-2F009

Category: A

Type: Motor Operated

Function: RHR Shutdown Cooling supply inside/outside primary containment isolation and Reactor Coolant Pressure Boundary (RCPB) isolation valves.

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the closed position.

Cold Shutdown Test Justification: These valves are interlocked to prevent operation when Reactor Coolant System pressure is greater than 75 psig. Because Reactor Coolant System pressure during power operation is significantly higher than 75 psig these valves cannot be exercised. Overriding the interlocks for the purpose of testing these valves would defeat their RCPB isolation function and potentially subject the lower pressure rated RHR suction piping to Reactor Coolant system pressure.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Also, if partial stroke testing were possible, it would result in the same condition described above. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 52-VCS-1, REVISION 2

System:	Core Spray	
Valve(s):	HV-52-1F005 HV-52-1F006A,B	HV-52-2F005 HV-52-2F006A,B
Category:	A [HV-52-1(2)F005]	
Type:	Motor Operated	
Category:	A/C [HV-52-1(2)F006A,B]	
Function:	Primary containment isolation, Reactor Coolant Pressure Boundary isolation.	
Deferred Testing:	ISTC-3510 & 5121: Quarterly exercise and stroke time Category A valves to the open and closed positions. ISTC-3510 & 5221(a)(1): Quarterly exercise Category A/C valves to the open and closed positions.	
Cold Shutdown Test Justification:	These valves function as both primary containment isolation valves and as Reactor Coolant Pressure Boundary isolation valves. During power operation these valves protect the Core Spray System from being over pressurized by the Reactor Coolant System. Exercising these valves to the open position, with simultaneous failure of the other valve to perform its pressure isolation function, could cause the Core Spray System to be over pressurized resulting in a possible loss of the Core Spray System function.	
Quarterly Partial Stroke Testing:	None of the Category A valves will be partial-stroke tested. The motor-operated valve actuators are not designed to permit part-stroke testing.	
Cold Shutdown Testing:	Exercise and stroke time the Category A valves to the open and closed positions in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g). Exercise the Category A/C valves to the open and closed positions in accordance with ISTC-3522(b) & ISTC-5221 during each cold shutdown except as specified in ISTC-3522(e).	

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 55-VCS-1, REVISION 3

System: High Pressure Coolant Injection

Valve(s): HV-55-1F002
HV-55-2F002

Category: A

Type: Motor Operated

Function: HPCI steam supply; inboard primary containment isolation valve.

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the open and closed positions.

Cold Shutdown Test Justification: These valves are normally open during power operation to provide a flow path for supply steam to the HPCI Pump turbine. They are located inside primary containment and are therefore not accessible during operation, since it is inerted with nitrogen and is a high radiation area. If the valve failed in the closed position during exercise testing, a complete loss of system function would result. Plant shutdown, to restore the valve to an operable status would be required.

Quarterly Partial Stroke Testing: Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the open and closed positions in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown when primary containment is de-inerted except as specified in ISTC-3521(g).

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ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 55-VCS-2, REVISION 1

- DELETED -

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 55-VCS-3, REVISION 0

System: High Pressure Coolant Injection (HPCI)

Valves: 55-1F021, 55-2F021

Category: C

Function: The HPCI Turbine Exhaust Line Stop/Check Valve performs an active safety function in the open position to allow sufficient flow to pass to Suppression Pool when the HPCI pump is operating at rated flow.

Deferred Testing: ISTC-3510 & 5221(a)(2): Quarterly bidirectional test closed.

Justification: Because of the system configuration, these valves cannot be verified closed using visual verification or system parameters. The Stop Check manual operation as described in NUREG 1482 Rev1 Section 4.1.5.4 will be required to verify the closed position. Closure of these valves with steam available to the turbine would pose a safety hazard to personnel and a possible release of radioactivity. The valves are located on a platform high in the HPCI room. Steam admission to the turbine with the valve closed would burst rupture discs in the exhaust line, filling the area/room with steam. Closure of these valves is limited to Cold Shutdown outages.

Test Frequency: Bidirectional test closed in accordance with ISTC-3522(b) & ISTC-5221(a)(2) during each cold shutdown except as specified in ISTC-3522(e).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 59-VCS-1, REVISION 2

System:	Primary Containment Instrument Gas (PCIG)
Valve(s):	HV-59-102 HV-59-202
Category:	A
Type:	Air Operated
Function:	PCIG Compressor suction outside containment isolation valves.
Deferred Testing:	ISTC-3510, 3560 & 5131: Quarterly exercise, fail-safe test and stroke time to the closed position.
Cold Shutdown Test Justification:	The PCIG system is supplied by compressors which take suction directly from the drywell atmosphere. This prevents a potential build up of pressure in the primary containment due to pneumatic operator leakage, and helps to maintain oxygen concentration in the inerted containment within Technical Specification limits. There is only one PCIG suction line installed on each Unit. Therefore, testing these valves during operation would require shutting down the associated compressors. Failure in the closed position during testing would result in a loss of PCIG system supply to various safety-related loads, including the MSIV's. A prolonged lack of supply pressure could result in the MSIV's starting to drift shut which in turn would cause a plant trip.
Quarterly Partial Stroke Testing:	Valve actuator design does not include provisions for partial stroke testing. Partial stroke testing will not be performed.
Cold Shutdown Testing:	Exercise, fail-safe test and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5131 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION NO. 59-VCS-2, REVISION 1

System: Primary Containment Instrument Gas (PCIG)

Valves: HV-59-101 HV-59-201

Category: A

Type: Motor Operated

Function: PCIG Compressor suction inside containment isolation valves.

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the closed position.

Justification: The PCIG system is supplied by compressors which take suction directly from the drywell atmosphere. This prevents a potential build up of pressure in the primary containment due to pneumatic operator leakage, and helps to maintain oxygen concentration in the inerted containment within Technical Specification limits.
There is only one PCIG suction line installed on each Unit. Therefore, testing these valves during operation would require shutting down the associated compressor. Failure in the closed position during testing would result in a loss of PCIG system supply to various safety-related loads, including the MSIV's. A prolonged lack of supply pressure could result in the MSIV's starting to drift shut which in turn would cause a plant trip.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

ATTACHMENT 7

COLD SHUTDOWN JUSTIFICATIONS

COLD SHUTDOWN TEST JUSTIFICATION 87-VCS-1, REVISION 2

System: Drywell Chilled Water System (DCWS) (87)

Valve(s): HV-87-120A, HV-87-120B, HV-87-128, HV-087-122 HV-87-220A, HV-87-220B, HV-87-228, HV-087-222
HV-87-121A, HV-087-121B, HV-87-129, HV-87-123 HV-87-221A, HV-087-221B, HV-87-223, HV-87-229

Category: A
Type: Motor Operated

Function: Loop A & B Drywell/Reactor Building Chilled Cooling Water Supply Isolation Valves - Inboard/Outboard PCIVs
Loop A & B Drywell Chilled Cooling Water Return Isolation Valves Inboard/Outboard PCIVs

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the closed position.

Cold Shutdown Test Justification: These normally open DCWS supply and return valves for the Drywell Unit Coolers perform an active safety function in the closed position. They are identified in UFSAR Table 6.2.17 as containment isolation valves. These valves must be open during normal operating power to supply cooling water to the unit coolers, which regulate the temperature (pressure) in the drywell. The drywell temperature will increase if the valve failed to open following testing of their PCIV function. Conditions in the Drywell would require power reduction to prevent reaching an administrative limit requiring shut down. This justification is consistent with NUREG 1482 section 2.4.5. Technical Evaluation A1498736-07 documents the formal evaluation supporting 87-VCS-1.

Quarterly Partial Stroke Testing: Partial stroke testing would result in the same condition described above, if the valve failed to return to the full open position. Partial stroke testing will not be performed.

Cold Shutdown Testing: Exercise and stroke time to the closed position in accordance with ISTC-3521(c) & ISTC-5121 during each cold shutdown except as specified in ISTC-3521(g).

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ATTACHMENT 8

REFUELING OUTAGE JUSTIFICATION INDEX

Refueling Outage Justification No.	**Description**
GVROJ-1 Rev.1	Safeguard Piping Fill System - INACTIVE - see Condition Monitoring Plans
GVROJ-2	- Deleted -
15-ROJ-1 Rev.1	Check valves for compressed air supply to secondary containment inflatable seals nos. 1, 2, 7 and 10
41-ROJ-1 Rev.1	Feedwater inboard and outboard primary containment isolation check valves
41-ROJ-2 Rev.1	ADS Valve accumulator inlet check valves
41-ROJ-3 Rev.1	Inboard MSIV accumulator check valves
41-ROJ-4 Rev.1	Unit 1Outboard MSIV accumulator check valves
42-ROJ-1 Rev.1	Reactor level instrumentation reference leg backfill system check valves
43-ROJ-1 Rev 1	Reactor Recirculation Pump seals purge supply primary containment isolation check valves
46-ROJ-1 Rev.1	Reactor recirculation pumps seal purge water line bypass leakage vent valves
47-ROJ-1 Rev.1	- Deleted -
48-ROJ-1 Rev.1	SLC injection inboard and outboard primary containment isolation check valves
51-ROJ-1 Rev.1	Shutdown Cooling return containment isolation valves
51-ROJ-2 Rev.1	RHR Pump Minimum Flow Check Valves - INACTIVE - see Condition Monitoring Plans

ATTACHMENT 8

REFUELING OUTAGE JUSTIFICATION INDEX

Refueling Outage Justification No.	**Description**
51-ROJ-3 Rev.1	RHR Shutdown Cooling Injection Header Testable Check Valves
52-ROJ-1 Rev.2	Core spray injection check valves; containment isolation and RCS pressure boundary isolation valves
55-ROJ-1 Rev.2	HPCI pump suction from suppression pool check valves - INACTIVE - see Condition Monitoring Plans
55-ROJ-2 Rev.2	HPCI pump discharge to Feedwater and Core Spray - INACTIVE - see Condition Monitoring Plans
59-ROJ-1 Rev. 1	ADS Accumulator Nitrogen Supply check valves
59-ROJ-2	- Deleted -

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 15-ROJ-1, REVISION 1

System: Compressed Air

Valves:

15-1412 A, B, G, K	15-2412 A, B, G, K
15-1886 A, B, G, K	15-2886 A, B, G, K

Category: A/C

Function: Check valves for compressed air supply to secondary containment inflatable seals nos. 1, 2, 7 and 10.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position.

Justification: Exercise testing of these valves during plant operation or cold shutdown would require closing normal and backup air supply valves which would render the secondary containment inflatable seals nos. 1, 2, 7 and 10 inoperable. Refuel floor inflatable seals nos. 1, 2, 7 and 10 are required during plant operation and cold shutdown as a secondary containment boundary. Loss of secondary containment would require a plant shutdown.

Test Frequency: Exercise to the closed position in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 41-ROJ-1, REVISION 1

System: Nuclear Boiler

Valves: 41-1F010A, B 41-2F010A, B
HV-41-1F032A, B HV-41-2F032A, B

Category: A/C

Function: Feedwater inboard and outboard primary containment isolation check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position.

Justification: Since these valves are required to be open continuously during power operation, there is no practical means to reverse-flow test them quarterly.

Based on the configuration and operating conditions of the Feedwater system, the only practical means to reverse-flow test these valves is by measuring pressure drop or leakage across the valve seats. Since they are containment isolation valves, they are leak rate tested during refueling outages in accordance with 10CFR50, Appendix J. Performance of the leak rate testing requires access into primary containment in order to manipulate valves and install test equipment.

During power operation and normally during cold shutdowns, the primary containment atmosphere is inerted with nitrogen, limiting access to emergencies only. NUREG 1482, Section 3.1.1.3, recognizes de-inerting of containment for the purpose of conducting cold shutdown testing as impractical

Because leak testing at power is not possible, and is impractical at cold shutdown, these valves will be leak tested at refueling. Reverse flow closure will be verified during Appendix J, Type C testing.

Test Frequency: Exercise to the closed position in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 41-ROJ-2, REVISION 1

System: Nuclear Boiler

Valves: 41-1F036E, H, K, M, S 41-2F036E, H, K, M, S

Category: C

Function: ADS Valve accumulator inlet check valves.

Deferred Testing: ISTC-3510 & 5221(a)(1): Exercise to the open and closed positions.

Justification: Verification of reverse exercising requires isolating the associated instrument gas header and venting the upstream side through a test connection located inside primary containment. To verify forward exercising requires lowering the pressure in the associated ADS accumulator with the gas supply isolated, then opening the gas supply and observing that ADS accumulator pressure increases. Since installed pressure indication is not provided for the ADS accumulators a temporary test gauge must be installed on a pressure tap located inside the primary containment. During power operation and cold shutdown, the containment atmosphere is normally inerted with nitrogen, limiting access to emergencies only. NUREG 1482, Section 3.1.1.3, recognizes de-inerting of containment for the purpose of conducting cold shutdown testing as impractical.

Test Frequency: Exercise to the open and closed positions in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 41-ROJ-3, REVISION 1

System: Nuclear Boiler

Valves: 41-1F024A, B, C, D 41-2F024A, B, C, D

Category: C

Function: Inboard MSIV accumulator check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position and .bidirectional test open.

Justification: Verification of reverse exercising requires isolating the associated instrument nitrogen header, venting the upstream side of the check valve and observing accumulator pressure. These valves are located inside the primary containment and testing requires entering the containment for the installation of a temporary pressure gauge and to vent the upstream piping. During power operation and cold shutdown, the containment atmosphere is normally inerted with nitrogen limiting access to emergencies only. NUREG 1482, Section 3.1.1.3, recognizes de-inerting of containment for the purpose of conducting cold shutdown testing as impractical.

Test Frequency: Exercise to the closed position and bidirectional test open in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 41-ROJ-4, REVISION 1

System: Nuclear Boiler

Valves: 41-1F029A, B, C, D

Category: C

Function: Unit 1 Outboard MSIV accumulator check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position and bidirectional test open.

Justification: Unlike Unit 2 (refer to 41-VCS-5 in Attachment 7), the system configuration for Unit 1 does not include test connections to perform the required testing. Therefore, testing must be performed by disassembling mechanical connections and installing the necessary test equipment. During normal operation this method would require a reduction in power and closing the associated MSIV. In addition, the valves are located in a high temperature and high radiation area.
During Cold Shutdowns, the disassembly of the mechanical joints required to perform the test would prevent operation of the associated MSIV and could cause a delay in plant restart.

Test Frequency: Exercise to the closed position and bidirectional test open in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 42-ROJ-1, REVISION 1

System: Nuclear Boiler Vessel Instrumentation System

Valves: 42-1044A/B/C/D 42-2044A/B/C/D
42-1046A/B/C/D 42-2046A/B/C/D

Category: A/C

Function: Reactor level instrumentation reference leg backfill system check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the open and closed position.

Justification: Exercise testing of these check valves requires isolation of the Reactor Vessel level instrumentation reference leg backfill supply and the use of a test rig to introduce flow toward the check valve in the reverse direction. Failure to maintain a steady supply of fill water may result in a low level in the reference leg, which could cause erroneous high level indication. This, in turn, could initiate transients such as reduction of feedwater flow, MSIV closure or turbine trip. Isolation of the fill lines and use of the test rig also increases the possibility of air infiltration into the system which could result in ECCS or RPS safety system actuation.

During cold shutdowns, spurious level indications could interrupt the operation of systems required for decay heat removal, thereby placing the reactor in an unsafe condition. During refueling outages, sufficient time exists for decay heat to be reduced to a level which minimizes the impact of temporary interruption in the operation of systems required for decay heat removal such that testing can be performed.
In addition to plant safety concerns, personnel safety concerns must be considered since the process side of these valves is normally high energy (>500 psig) during power operation. Personnel safety risks are considerably reduced when testing is performed during refueling outages.

Test Frequency: Exercise to the open and closed position in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 43-ROJ-1, REVISION 1

System: Reactor Recirculation Pump System

Valves: 43-1004A,B 43-2004A,B

Category: A/C

Function: Reactor Recirculation Pump seals purge supply primary containment isolation check valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position.

Justification: These check valves are located inside primary containment in the Reactor Recirculation Pump seal purge water supply lines and are open during power operation. Exercising the valves to the closed position during operation would require interruption of flow to the pump seals.

Due to system configuration the most practical method to verify reverse flow closure of these valves is by leak testing. In order to leak test the valves, manual valves located inside the primary containment must be repositioned. During power operation and Cold Shutdown, the containment atmosphere is normally inerted with nitrogen, limiting access to emergencies only. NUREG 1482, Section 3.1.1.3, recognizes de-inerting of containment for the purpose of conducting cold shutdown testing as impractical.

Leak testing is not possible at power and is impractical during Cold Shutdowns, when containment is de-inerted, due to the possibility of delaying plant start-up.
Reverse flow exercising of these valves will be verified during 10CFR50 Appendix J Type C leak rate testing during refueling outages.

Test Frequency: Exercise to the closed position in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 46-ROJ-1, REVISION 1

System: Control Rod Drive - Part A

Valves: HV-46-125, HV-46-126, HV-46-225, HV-46-226

Category: B

Type: Motor Operated

Function: Reactor recirculation pumps seal purge water line bypass leakage vent valves.

Deferred Testing: ISTC-3510 & 5121: Quarterly exercise and stroke time to the open position.

Justification: These valves are non-ASME Safety Class motor-operated vent valves in a non-ASME Safety Class portion of the Control Rod Drive Hydraulic system which serve as Recirculation Pump seal purge water line bypass leakage vent valves. They have been determined to have an active safety function to open to prevent a possible release path through the CRD system piping outside secondary containment in the event of a Recirc Pump shaft seal failure, despite the fact that there are two in-series Category A/C (i.e., leak rate tested) containment isolation check valves between them and each Recirc Pump seal.

These valves are included in the IST Program as a conservative measure to assure that they are tested commensurate with their importance to safety.

In order to test these valves during power operation or Cold Shutdowns, the Recirc Pump seal purge supply valves, HV-46-1(2)27 and HV-46-1(2)28, would need to be closed to prevent exposing the CRW drains to CRD Drive Water Pump discharge pressure. Failure of either of these valves in the closed position would isolate purge water to the pump seals, requiring a shutdown and possibly resulting in damage to the Recirc Pump shaft pump seals.

Test Frequency: Exercise and stroke-time to the open position in accordance with ISTC-3521(e) and ISTC-5121 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 48-ROJ-1, REVISION 1

System: Standby Liquid Control (SLC)

Valves:

HV-48-1F006A,B	HV-48-2F006A,B
48-1F007	48-2F007
48-1027	48-2027

Category:

A/C	[HV-48-1(2)F006A,B and 48-1(2)F007]
C	[48-1(2)027]

Function: SLC injection inboard and outboard primary containment isolation check valves [HV-48-1(2)F006A,B and 48-1(2)F007].
SLC inboard injection check valves [48-1(2)027].

Deferred Testing: ISTC-3510 & 5221(a)(2): Quarterly exercise check valves 48-1(2)027 to the open position and bidirectional test closed

ISTC-3510 & 5221(a)(1): Quarterly exercise stop check valves HV-48-1(2)F006A,B to the open position and check valves 48-1(2)F007 to the open & closed positions.

Justification: Verifying forward flow operability requires firing a squib valve and injecting relatively cold water into the Reactor Coolant System using the standby liquid control pumps. This would result in an excessive number of thermal cycles to SLC piping and components and could result in a reactivity transient caused by an increase in moderator (i.e., Reactor Coolant) density.
Since the firing of a squib valve requires valve disassembly to replace internals, firing should be minimized. Therefore, forward flow testing of the check valves will be performed during SLC injection testing as required by Technical Specifications 4.1.5.d.1.
Due to system configuration, the most practical method to verify reverse flow closure of 48-1(2)F007 is by leak testing. In order to perform the leak test, temporary test equipment must be installed inside primary containment. During power operation and normally during Cold Shutdowns, the primary containment atmosphere is inerted with nitrogen, limiting access to emergencies only. Because leak testing at power is not possible, and is impractical during cold shutdowns, closure of this valve will be verified by performance of the 10CFR50, Appendix J, Type C leak rate testing during each refueling outage.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 48-ROJ-1, REVISION 1(cont.)

Test Frequency: Exercise to the open position and bidirectional test closed 48-1(2)027 in accordance with ISTC-3522(c) & ISTC-5221(a)(2) during refueling outages.

Exercise to the open and closed positions 48-1(2)F007 in accordance with ISTC-3522(c) & ISTC-5221(a)(1) during refueling outages.

Exercise to the open position HV-48-1(2)F006A,B accordance with ISTC-3522(c) & ISTC-5221(a)(1) during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 51-ROJ-1, REVISION 1

System: Residual Heat Removal (RHR)

Valves: HV-51-1F050A,B HV-51-2F050A,B

Category: A/C

Function: Shutdown Cooling return containment isolation valves

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position and bidirectional test open.

Justification: Section 4.1.6 of NUREG 1482 Extension of Test Interval to Refueling Outage for Check Valves Verified Closed by Leak Testing. These valves cannot be verified in the closed position quarterly because they do not have remote position indication and are located inside containment. These valves lack design provisions for system testing to verify closure capability at any plant condition. Recognizing that the setup and performance limitations may render leak testing impractical during power operation and cold shutdown, the NUREG (Section 4.1.6) allows implementation, of this extension in test frequency, as acceptable.

Test Frequency: Exercise to the closed position and bidirectional test open in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 51-ROJ-3, REVISION 1

System: Residual Heat Removal (RHR)

Valves: 51-1200A,B, 51-2200A,B

Category: A/C

Function: These check valves relieve pressure on the upstream side of the RHR Shutdown Cooling Injection Header Testable Check Valves (F050s) to the Recirc System pump suction, thus maintaining differential pressure to seat the F050s. They have safety functions as primary containment isolation valves as well as Reactor Coolant System Pressure Isolation Valves.

Deferred Testing: ISTC-3510 & 5221(a)(3): Quarterly exercise to the closed position and bidirectional.test open.

Justification: These valves are located inside the primary containment. Testing of these valves requires the installation of test equipment and manipulation of valves which are also located inside the primary containment. During power operation and Cold Shutdown, the containment atmosphere is normally inerted with nitrogen limiting access to emergencies only. NUREG 1482, Section 3.1.1.3, recognizes de-inerting the containment for the purpose of conducting cold shutdown testing as impractical. In addition, high radiation levels during power operations prohibit containment entry.

Test Frequency: Exercise to the closed position and bidirectional test open in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 52-ROJ-1, REVISION 2

System: Core Spray

Valves: HV-52-108 HV-52-208

Category: A/C

Function: Core spray injection check valves; containment isolation and RCS pressure boundary isolation valves.

Deferred Testing: ISTC-3510 & 5221(a)(1): Quarterly exercise to the open and closed positions..

Justification: The above valves are equipped with air actuators that are designed to assist in valve closure only. Therefore, flow exercising in the forward direction can only be accomplished by injection into the vessel, which cannot be performed during normal operation because the Core Spray pump is not capable of overcoming reactor pressure. The HPCI system also injects through this valve. However, this would require the injection of cold water from the Condensate Storage Tank into the reactor vessel via the HPCI pump. This would result in an excessive number of thermal cycles to system piping and components and could result in a reactivity transient caused by an increase in moderator (i.e., Reactor Coolant) density.

Furthermore, HPCI injection would not constitute a full-stroke test, since Core Spray minimum flow requirements are beyond the capacity of the HPCI Pump. Therefore, full-stroke exercising of these valves will be performed manually, using a mechanical exerciser in accordance with ISTC-5221(b).

Manual exercising of these valves cannot be performed during normal operation because they isolate the Reactor Coolant system from the lower pressure Core Spray system components. Testing during Cold Shutdowns would require equalizing pressure across the valve, which would require injection of Condensate into the vessel through a stagnant leg of the Core Spray system. Use of this injection path would introduce crud into the reactor vessel and most likely delay unit restart. Crud removal from this leg of piping can only be performed during refuel by flushing the Core Spray header into the Reactor and using the Reactor Water Cleanup system to reduce crud levels to within Technical Specification 3/4.4.4 chemistry requirements. Additionally, manually forward exercising requires partial disassembly of the actuator, which if attempted during Cold Shutdown, could result in a delayed plant start-up.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 52-ROJ-1, REVISION 2(cont.)

Test Frequency: Exercise to the open and closed positions in accordance with ISTC-3522(c) & ISTC-5221 during refueling outages. Manual exercising to the open position will be performed in accordance with ISTC-5221(b) and closure will be verified by leak rate testing in accordance with 10CFR50, Appendix J.

ATTACHMENT 9

REFUELING OUTAGE JUSTIFICATIONS

REFUELING OUTAGE JUSTIFICATION NO. 59-ROJ-1, REVISION 1

System: Primary Containment Instrument Gas

Valves:

59-1001	59-2001
59-1005A,B	59-2005A,B
59-1023E,H,K,M,S	59-2023E,H,K,M,S
59-1024E,H,K,M,S	59-2024E,H,K,M,S
59-1056	59-2056
59-1112	59-2112
59-1128	59-2128
59-1131E,H,K,M,S	59-2131E,H,K,M,S

Category:

A/C	59-1(2)001; 59-1(2)005A,B; 59-1(2)023E,H,K,M,S; 59-1(2)056; 59-1(2)112; 59-1(2)128; 59-1(2)131E,H,K,M,S
C	59-1(2)024E,H,K,M,S

Function: ADS Accumulator Nitrogen Supply check valves

Deferred Testing: ISTC-3510 & 5221(a)(1): Quarterly exercise 59-1(2)023E/H/K/M/S, 59-1(2)112, 59-1(2)128 to the open and closed position

ISTC-3510 & 5221(a)(3): Quarterly exercise all other Valves to the closed position and bidirectional test open.

Justification: These valves are all located inside the primary containment. Testing of these valves requires the installation of test equipment and manipulation of valves which are also located inside the primary containment. During power operation and Cold Shutdown, the containment atmosphere is normally inerted with nitrogen limiting access to emergencies only. NUREG 1482, Section 3.1.1.3, recognizes de-inerting of containment for the purpose of conducting cold shutdown testing as impractical. In addition, high radiation levels during power operations prohibit containment entry.

Test Frequency: Exercise to the open and closed positions 59-1(2)023E/H/K/M/S, 59-1(2)112, 59-1(2)128 in accordance with ISTC-3522(c) & ISTC-5221(a)(1) during refueling outages.

Exercise to the closed position and bidirectional test open all other Valves in accordance with ISTC-3522(c) & ISTC-5221(a)(3) during refueling outages

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ATTACHMENT 10

TECHNICAL POSITION INDEX

Technical Position No.	**Description**
TP-EXE-IST-00-04	Exelon IST Program Technical Position Classification of Skid Mounted Components

ATTACHMENT 11

TECHNICAL POSITIONS

EXELON IST PROGRAM TECHNICAL POSITION

Classification of Skid Mounted Components

Purpose

The purpose of this technical position is to clarify requirements for classification of various components including Diesel Oil Transfer Pumps as skid mounted components, and to clarify testing requirements of check valves designated as skid mounted.

Background

The ASME Code allows classification of some components as skid mounted when their satisfactory operation is demonstrated by the performance of major components. Testing of the major component is sufficient to satisfy IST testing requirements for skid mounted components. In the 1996a addenda to the ASME OM Code (endorsed by 10CFR50.55(a) in October 2000), the term skid-mounted was clarified by the addition of ISTA paragraph 1.7:

> ISTA 1.7 Definitions
>
> *Skid mounted components and component sub assemblies* – components integral to or that support operation of major components, even though these components may not be located directly on the skid. In general, these components are supplied by the manufacturer of the major component. Examples include: diesel skid-mounted fuel oil pumps and valves, steam admission and trip throttle valves for high-pressure coolant injection or auxiliary feedwater turbine-driven pumps, and solenoid-operated valve provided to control the air-operated valve.

This definition was further clarified in the 1998 & 2004 ASME OM Code:

> ISTA-2000 DEFINITIONS
>
> *Skid mounted pumps and valves* – pumps and valves integral to or that support operation of major components, even though these components may not be located directly on the skid. In general, these pumps and valves are supplied by the manufacturer of the major component. Examples include:
> (a) diesel fuel oil pumps and valves;
> (b) steam admission and trip throttle valves for high-pressure coolant injection pumps;
> (c) steam admission and trip throttle valves for auxiliary feedwater turbine driven pumps;
> (d) solenoid-operated valves provided to control an air-operated valve.

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TECHNICAL POSITIONS

In section 3.4 of NUREG 1482, the NRC supports the designation of components as skid mounted:

> The staff has determined that the testing of the major component is an acceptable means for verifying the operational readiness of the skid-mounted and component subassemblies if the licensee documents this approach in the IST Program. This is acceptable for both Code class components and non-Code class components tested and tracked by the IST Program.

Subsection ISTB of OM Code-2004, "Inservice Testing of Pumps in Light-Water Reactor Nuclear Power Plants", Paragraph ISTB-1200(c) "Exclusions" states

> "skid mounted pumps that are tested as part of the major component and are justified by the owner to be adequately tested."

Subsection ISTC of OMa-1996, "Inservice Testing of Valves in Light-Water Reactor Power Plants", Paragraph 1.2, "Exclusions" states:

> "....Skid-mounted valves and component subassemblies are excluded from this Subsection provided they are tested as part of the major component and are determined by the Owner to be adequately tested."

Subsection ISTC of OM Code-2004, "Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants", Paragraph ISTC-1200, "Exclusions" states:

> "Skid-mounted valves are excluded from this Subsection provided they are tested as part of the major component and are justified by the Owner to be adequately tested."

Position

The 1998 & 2004 ASME OM Code definition of skid mounted should be used for classification of components in the Exelon Inservice Testing Program. In addition, for a component to be considered skid mounted:

- The major component associated with the skid mounted component must be surveillance tested at a frequency sufficient to meet ASME OM Code test frequency for the skid mounted component.
- Satisfactory operation of the skid mounted component must be demonstrated by satisfactory operation of the major component.
- The IST Bases Document should describe the bases for classifying a component as skid mounted, and the IST Program Plan should reference this technical position for the component.

For Stations committed to the 1996 addenda of the 1995 OM Code for Inservice Exercise Testing of Category C Check Valves (ISTC 4.5 and Appendix II), testing as required by ISTC 4.5 does not apply for check valves designated as skid mounted.

ATTACHMENT 11

TECHNICAL POSITIONS

Justification

Classification of components as skid mounted eliminates the need for testing of sub components that are redundant with testing of major components provided testing of the major components demonstrates satisfactory operation of the "skid mounted" components.

As recognized in section 3.4 of NUREG 1482:

> Various pumps and valves procured as part of larger component subassemblies are often not designed to meet the requirements for components in ASME code classes 1, 2, and 3.

References

All references are called out in the text of the technical position.

Assumptions

None

Status

Final

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ATTACHMENT 12

INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
CONTROL STRUCTURE CHILLED WATER(CSCW)	0A-P162	3	A	M-90 (SHT1)	E-4	C	Motor	D/P, Q, V	90-PRR-1	
CONTROL STRUCTURE CHILLED WATER(CSCW)	0B-P162	3	A	M-90 (SHT1)	F-2	C	Motor	D/P, Q, V	90-PRR-1	
EMERGENCY SERVICE WATER (ESW)	0A-P548	3	A	M-11 (SHT1)	H-8	VLS	Motor	D/P, Q, V	11-PRR-1	CALCULATED TDH USED FOR PRESSURE MEASUREMENT.
EMERGENCY SERVICE WATER (ESW)	0B-P548	3	A	M-11 (SHT1)	H-4	VLS	Motor	D/P, Q, V	11-PRR-1	CALCULATED TDH USED FOR PRESSURE MEASUREMENT.
EMERGENCY SERVICE WATER (ESW)	0C-P548	3	A	M-11 (SHT1)	H-6	VLS	Motor	D/P, Q, V	11-PRR-1	CALCULATED TDH USED FOR PRESSURE MEASUREMENT.
EMERGENCY SERVICE WATER (ESW)	0D-P548	3	A	M-11 (SHT1)	H-2	VLS	Motor	D/P, Q, V	11-PRR-1	CALCULATED TDH USED FOR PRESSURE MEASUREMENT.
RHR SERVICE WATER (RHRSW)	0A-P506	3	A	M-12 (SHT1)	E-6	VLS	Motor	D/P, Q, V		CALCULATED TDH USED FOR PRESSURE MEASUREMENT.
RHR SERVICE WATER (RHRSW)	0B-P506	3	A	M-12 (SHT1)	E-4	VLS	Motor	D/P, Q, V		CALCULATED TDH USED FOR PRESSURE MEASUREMENT.

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
RHR SERVICE WATER (RHRSW)	0C-P506	3	A	M-12 (SHT1)	E-5	VLS	Motor	D/P, Q, V		CALCULATED TDH USED FOR PRESSURE MEASUREMENT.
RHR SERVICE WATER (RHRSW)	0D-P506	3	A	M-12 (SHT1)	E-2	VLS	Motor	D/P, Q, V		CALCULATED TDH USED FOR PRESSURE MEASUREMENT.
CORE SPRAY (CS)	1A-P206	2	B	M-52 (SHT2)	C-7	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
CORE SPRAY (CS)	1B-P206	2	B	M-52 (SHT2)	C-3	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT.
CORE SPRAY (CS)	1C-P206	2	B	M-52 (SHT2)	C-5	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
CORE SPRAY (CS)	1D-P206	2	B	M-52 (SHT2)	C-2	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
DIESEL FUEL OIL (EDG)	1A-P514	3		M-20 (SHT3)	D-4	VLS	Motor			SKID MOUNTED TP-EXE-IST-00-04
DIESEL FUEL OIL (EDG)	1B-P514	3		M-20 (SHT3)	D-4	VLS	Motor			SKID MOUNTED TP-EXE-IST-00-04
DIESEL FUEL OIL (EDG)	1C-P514	3		M-20 (SHT3)	D-4	VLS	Motor			SKID MOUNTED TP-EXE-IST-00-04

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
DIESEL FUEL OIL (EDG)	1D-P514	3		M-20 (SHT3)	D-4	VLS	Motor			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN FUEL PUMP (EDG)	1A-P537	3		M-20 (SHT3)	G-7	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN FUEL PUMP (EDG)	1B-P537	3		M-20 (SHT3)	G-7	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN FUEL PUMP (EDG)	1C-P537	3		M-20 (SHT3)	G-7	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN FUEL PUMP (EDG)	1D-P537	3		M-20 (SHT3)	G-7	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN JACKET WATER (EDG)	1A-P536	3		M-20 (SHT4)	D-6	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN JACKET WATER (EDG)	1B-P536	3		M-20 (SHT4)	D-6	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN JACKET WATER (EDG)	1C-P536	3		M-20 (SHT4)	D-6	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN JACKET WATER (EDG)	1D-P536	3		M-20 (SHT4)	D-6	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN AIR COOLER (EDG)	1A-P569	3		M-20 (SHT5)	E-5	C	Engine			SKID MOUNTED TP-EXE-IST-00-04

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
DIESEL ENGINE DRIVEN AIR COOLER (EDG)	1B-P569	3		M-20 (SHT5)	E-5	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN AIR COOLER (EDG)	1C-P569	3		M-20 (SHT5)	E-5	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN AIR COOLER (EDG)	1D-P569	3		M-20 (SHT5)	E-5	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN MAIN LUBE OIL (EDG)	1A-P581	3		M-20 (SHT7)	F-5	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN MAIN LUBE OIL (EDG)	1B-P581	3		M-20 (SHT7)	F-5	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN MAIN LUBE OIL (EDG)	1C-P581	3		M-20 (SHT7)	F-5	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN MAIN LUBE OIL (EDG)	1D-P581	3		M-20 (SHT7)	F-5	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
HIGH PRESSURE COOLANT INJECTION (HPCI)	1O-P204	2	B	M-56 (SHT1)	F-5	C	Turbine	N, D/P, Q, Vc		VARIABLE SPEED PUMP
REACTOR CORE ISOLATION COOLING (RCIC)	1O-P203	2	B	M-50 (SHT1)	E-6	C	Turbine	N, D/P, Q, Vc		VARIABLE SPEED PUMP

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
RESIDUAL HEAT REMOVAL (RHR)	1A-P202	2	A	M-51 (SHT1)	B-4	VLS	Motor	D/P, Q, V		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
RESIDUAL HEAT REMOVAL (RHR)	1B-P202	2	A	M-51 (SHT3)	B-5	VLS	Motor	D/P, Q, V		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
RESIDUAL HEAT REMOVAL (RHR)	1C-P202	2	B	M-51 (SHT1)	B-3	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
RESIDUAL HEAT REMOVAL (RHR)	1D-P202	2	B	M-51 (SHT3)	B-6	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
SAFEGUARD PIPING FILL (SPF)	1A-P256	2	B	M-52 (SHT2)	G-2	C	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
SAFEGUARD PIPING FILL (SPF)	1B-P256	2	B	M-52 (SHT2)	F-2	C	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
STANDBY LIQUID CONTROL (SLC)	1A-P208	2	B	M-48 (SHT1)	E-5	PD	Motor	Pc, Q, Vc		
STANDBY LIQUID CONTROL (SLC)	1B-P208	2	B	M-48 (SHT1)	C-5	PD	Motor	Pc, Q, Vc		
STANDBY LIQUID CONTROL (SLC)	1C-P208	2	B	M-48 (SHT1)	B-5	PD	Motor	Pc, Q, Vc		

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 2

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
CORE SPRAY (CS)	2A-P206	2	B	M-52 (SH4)	C-7	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
CORE SPRAY (CS)	2B-P206	2	B	M-52 (SHT4)	C-3	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
CORE SPRAY (CS)	2C-P206	2	B	M-52 (SHT4)	C-5	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
CORE SPRAY (CS)	2D-P206	2	B	M-52 (SHT4)	C-2	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
DIESEL ENGINE DRIVEN JACKET WATER (EDG)	2A-P536	3		M-20 (SHT10)	D-6	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN JACKET WATER (EDG)	2B-P536	3		M-20 (SHT10)	D-6	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN JACKET WATER (EDG)	2C-P536	3		M-20 (SHT10)	D-6	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN JACKET WATER (EDG)	2D-P536	3		M-20 (SHT10)	D-6	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN FUEL PUMP (EDG)	2A-P537	3		M-20 (SHT9)	G-7	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN FUEL PUMP (EDG)	2B-P537	3		M-20 (SHT9)	G-7	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 2

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
DIESEL ENGINE DRIVEN FUEL PUMP (EDG)	2C-P537	3		M-20 (SHT9)	G-7	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN FUEL PUMP (EDG)	2D-P537	3		M-20 (SHT9)	G-7	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN AIR COOLER (EDG)	2A-P569	3		M-20 (SHT11)	E-5	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN AIR COOLER (EDG)	2B-P569	3		M-20 (SHT11)	E-5	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN AIR COOLER (EDG)	2C-P569	3		M-20 (SHT11)	E-5	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN AIR COOLER (EDG)	2D-P569	3		M-20 (SHT11)	E-5	C	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN MAIN LUBE OIL (EDG)	2A-P581	3		M-20 (SHT13)	F-5	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN MAIN LUBE OIL (EDG)	2B-P581	3		M-20 (SHT13)	F-5	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN MAIN LUBE OIL (EDG)	2C-P581	3		M-20 (SHT13)	F-5	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04
DIESEL ENGINE DRIVEN MAIN LUBE OIL (EDG)	2D-P581	3		M-20 (SHT13)	F-5	PD	Engine			SKID MOUNTED TP-EXE-IST-00-04

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 2

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
DIESEL FUEL OIL (EDG)	2A-P514	3		M-20 (SHT9)	D-4	VLS	Motor			SKID MOUNTED TP-EXE-IST-00-04
DIESEL FUEL OIL (EDG)	2B-P514	3		M-20 (SHT9)	D-4	VLS	Motor			SKID MOUNTED TP-EXE-IST-00-04
DIESEL FUEL OIL (EDG)	2C-P514	3		M-20 (SHT9)	D-4	VLS	Motor			SKID MOUNTED TP-EXE-IST-00-04
DIESEL FUEL OIL (EDG)	2D-P514	3		M-20 (SHT9)	D-4	VLS	Motor			SKID MOUNTED TP-EXE-IST-00-04
HIGH PRESSURE COOLANT INJECTION (HPCI)	2O-P204	2	B	M-56 (SHT2)	F-5	C	Turbine	N, D/P, Q, Vc		VARIABLE SPEED PUMP
REACTOR CORE ISOLATION COOLING (RCIC)	2O-P203	2	B	M-50 (SHT2)	E-6	C	Turbine	N, D/P, Q, Vc		VARIABLE SPEED PUMP
RESIDUAL HEAT REMOVAL (RHR)	2A-P202	2	A	M-51 (SHT5)	B-4	VLS	Motor	D/P, Q, V		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
RESIDUAL HEAT REMOVAL (RHR)	2B-P202	2	A	M-51 (SHT7)	B-5	VLS	Motor	D/P, Q, V		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
RESIDUAL HEAT REMOVAL (RHR)	2C-P202	2	B	M-51 (SHT5)	B-3	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT

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INSERVICE TESTING PUMP TABLE

LIMERICK GENERATING STATION- UNIT 2

PUMP NAME/ DESCRIPTION	PUMP ID #	CODE CLASS	GRP	P&ID	COORD.	PUMP TYPE	DRIVER	TEST PARAMETERS	RELIEF REQUEST	REMARKS
RESIDUAL HEAT REMOVAL (RHR)	2D-P202	2	B	M-51 (SHT7)	B-6	VLS	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
SAFEGUARD PIPING FILL (SPF)	2A-P256	2	B	M-52 (SHT4)	G-2	C	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
SAFEGUARD PIPING FILL (SPF)	2B-P256	2	B	M-52 (SHT4)	F-2	C	Motor	D/P, Q, Vc		CALCULATED TDH USED FOR PRESSURE MEASUREMENT
STANDBY LIQUID CONTROL (SLC)	2A-P208	2	B	M-48 (SHT2)	E-5	PD	Motor	Pc, Q, Vc		
STANDBY LIQUID CONTROL (SLC)	2B-P208	2	B	M-48 (SHT2)	C-5	PD	Motor	Pc, Q, Vc		
STANDBY LIQUID CONTROL (SLC)	2C-P208	2	B	M-48 (SHT2)	B-5	PD	Motor	Pc, Q, Vc		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 01 MAIN STEAM

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-01-108	2	M-01 (SHT 1)	D-8	B	A	6.00	GT	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	01-VCS-3	
HV-01-109	2	M-01 (SHT 1)	C-8	B	A	6.00	GT	MO	C	C	AI	N	ET-C, ST-C(C), PI-T	01-VCS-3	
HV-01-111	2	M-01 (SHT 1)	H-8	B	A	8.00	GT	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	01-VCS-2	
HV-01-150	2	M-01 (SHT 1)	G-8	B	A	4.00	GT	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	01-VCS-1	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
11-0001A	3	M-11 (SHT 1)	G-7	C	A	20.00	CK	SA	C	OC	-	N	ET-Q(O&C)		
11-0001B	3	M-11 (SHT 1)	G-4	C	A	20.00	CK	SA	C	OC	-	N	ET-Q(O&C)		
11-0001C	3	M-11 (SHT 1)	G-6	C	A	20.00	CK	SA	C	OC	-	N	ET-Q(O&C)		
11-0001D	3	M-11 (SHT 1)	G-3	C	A	20.00	CK	SA	C	OC	-	N	ET-Q(O&C)		
11-0032A	3	M-11 (SHT 2)	F-2	C	A	6.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** ESW Grp1
11-0032B	3	M-11 (SHT 2)	D-2	C	A	6.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** ESW Grp1
11-0062	3	M-11 (SHT 2)	E-7	A/C	A	3.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
11-0063	3	M-11 (SHT 5)	D-3	A/C	A	2.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		
11-0064A	3	M-11 (SHT 1)	E-7	C	A	20.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** ESW Grp2
11-0064B	3	M-11 (SHT 1)	E-7	C	A	20.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** ESW Grp2
11-0065A	3	M-11 (SHT 1)	E-2	C	A	20.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** ESW Grp2
11-0065B	3	M-11 (SHT 1)	E-2	C	A	20.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** ESW Grp2
11-1007	3	M-11 (SHT 2)	B-6	C	A	8.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** U/1 ESW Grp3
11-1009	3	M-11 (SHT 3)	D-4	C	A	8.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** U/1 ESW Grp3

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
11-1011	3	M-11 (SHT 2)	C-7	A/C	A	8.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		
11-1012	3	M-11 (SHT 3)	E-3	A/C	A	8.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		
HV-11-011A	3	M-11 (SHT 1)	E-8	B	P	20.00	BF	MO	O	O	AI	N	PI-T		
HV-11-011B	3	M-11 (SHT 1)	E-8	B	P	20.00	BF	MO	O	O	AI	N	PI-T		
HV-11-015A	3	M-11 (SHT 1)	E-2	B	A	20.00	BF	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-015B	3	M-11 (SHT 1)	E-1	B	P	20.00	BF	MO	O	O	AI	N	PI-T		
HV-11-041	3	M-11 (SHT 2)	A-6	B	A	8.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
HV-11-043	3	M-11 (SHT 2)	E-8	B	A	3.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-044	3	M-11 (SHT 3)	C-4	B	A	8.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
HV-11-046	3	M-11 (SHT 4)	B-7	B	A	6.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
HV-11-047	3	M-11 (SHT 5)	B-4	B	A	6.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
HV-11-048	3	M-11 (SHT 5)	C-3	B	A	2.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-071	3	M-11 (SHT 2)	A-5	B	A	8.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-073	3	M-11 (SHT 2)	D-8	B	A	3.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-074	3	M-11 (SHT 3)	C-4	B	A	8.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
HV-11-076	3	M-11 (SHT 4)	B-6	B	A	6.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
HV-11-077	3	M-11 (SHT 5)	B-4	B	A	6.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
HV-11-078	3	M-11 (SHT 5)	C-3	B	A	2.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-101A	3	M-11 (SHT 2)	F-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-101B	3	M-11 (SHT 3)	F-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-101C	3	M-11 (SHT 2)	G-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-101D	3	M-11 (SHT 3)	G-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-101E	3	M-11 (SHT 2)	G-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-101F	3	M-11 (SHT 3)	F-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-101G	3	M-11 (SHT 2)	H-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-101H	3	M-11 (SHT 3)	G-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-104A	3	M-11 (SHT 2)	C-5	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-104B	3	M-11 (SHT 3)	C-5	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-104C	3	M-11 (SHT 2)	C-3	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-104D	3	M-11 (SHT 3)	C-7	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-104E	3	M-11 (SHT 2)	B-5	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-104F	3	M-11 (SHT 3)	B-5	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-104G	3	M-11 (SHT 2)	B-3	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-104H	3	M-11 (SHT 3)	B-7	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-107	3	M-11 (SHT 1)	G-8	B	P	4.00	GT	MO	C	C	AI	N	PI-T		
HV-11-121	3	M-11 (SHT 2)	A-7	B	A	8.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-123	3	M-11 (SHT 2)	A-7	B	A	8.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-125	3	M-11 (SHT 3)	C-3	B	A	8.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-126	3	M-11 (SHT 3)	C-3	B	A	8.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-127	3	M-11 (SHT 3)	B-3	B	P	10.00	GT	AO	C	C	C	N	PI-T		
HV-11-128	3	M-11 (SHT 3)	D-3	B	P	10.00	GT	AO	C	C	C	N	PI-T		
HV-11-131B	3	M-11 (SHT 1)	D-5	B	P	6.00	SK	MO	C	C	AI	N			Alt Supply Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-131D	3	M-11 (SHT 1)	D-5	B	P	6.00	SK	MO	C	C	AI	N			Alt Supply Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-132A	3	M-11 (SHT 1)	D-7	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
HV-11-132B	3	M-11 (SHT 1)	D-5	B	P	6.00	GT	MO	C	C	AI	N			Alt Return Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-132C	3	M-11 (SHT 1)	D-6	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
HV-11-132D	3	M-11 (SHT 1)	D-5	B	P	6.00	GT	MO	C	C	AI	N			Alt Return Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-133A	3	M-11 (SHT 1)	D-6	B	P	6.00	SK	MO	C	C	AI	N			Alt Supply Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-133C	3	M-11 (SHT 1)	D-6	B	P	6.00	SK	MO	C	C	AI	N			Alt Supply Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and

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INSERVICE TESTING VALVE TABLE

A1328163-03.

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INSERVICE TESTING VALVE TABLE

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-134A	3	M-11 (SHT 1)	D-7	B	P	6.00	GT	MO	C	C	AI	N			Alt Return Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-134B	3	M-11 (SHT 1)	D-5	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
HV-11-134C	3	M-11 (SHT 1)	D-6	B	P	6.00	GT	MO	C	C	AI	N			Alt Return Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-134D	3	M-11 (SHT 1)	D-5	B	P	6.00	GT	MO	O	O	AI	N	PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-11-051A	3	M-11 (SHT 2)	G-3	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		
PSV-11-051B	3	M-11 (SHT 2)	E-3	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		
PSV-11-107A	3	M-11 (SHT 1)	C-6	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-11-107B	3	M-11 (SHT 1)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-11-107C	3	M-11 (SHT 1)	C-6	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-11-107D	3	M-11 (SHT 1)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 12 RHR SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
12-0001A	3	M-12 (SHT 1)	E-6	C	A	20.00	CK	SA	C	OC	-	N	ET-Q(O&C)		
12-0001B	3	M-12 (SHT 1)	E-4	C	A	20.00	CK	SA	C	OC	-	N	ET-Q(O&C)		
12-0001C	3	M-12 (SHT 1)	E-5	C	A	20.00	CK	SA	C	OC	-	N	ET-Q(O&C)		
12-0001D	3	M-12 (SHT 1)	E-3	C	A	20.00	CK	SA	C	OC	-	N	ET-Q(O&C)		
12-1011	3	M-12 (SHT 1)	C-8	B	A	6.00	GT	MA	OC	C	AI	N	ET-T(C)		
HV-12-031A	3	M-12 (SHT 1)	B-6	B	A	30.00	BF	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-12-031B	3	M-12 (SHT 1)	B-3	B	A	30.00	BF	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-12-031C	3	M-12 (SHT 1)	B-6	B	A	30.00	BF	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 12 RHR SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-12-031D	3	M-12 (SHT 1)	B-3	B	A	30.00	BF	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-12-032A	3	M-12 (SHT 1)	A-6	B	A	30.00	BF	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-12-032B	3	M-12 (SHT 1)	B-4	B	A	30.00	BF	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-12-032C	3	M-12 (SHT 1)	B-5	B	A	30.00	BF	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-12-032D	3	M-12 (SHT 1)	A-3	B	A	30.00	BF	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-12-110	3	M-12 (SHT 1)	E-8	B	P	4.00	GT	MO	C	C	AI	N	PI-T		
HV-12-111	3	M-12 (SHT 1)	A-6	B	A	30.00	BF	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-12-112	3	M-12 (SHT 1)	D-7	B	A	36.00	BF	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 12 RHR SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-12-113	3	M-12 (SHT 1)	A-6	B	A	30.00	BF	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-12-114	3	M-12 (SHT 1)	D-7	B	A	36.00	BF	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
PSV-12-001A	3	M-12 (SHT 1)	F-6	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-12-001B	3	M-12 (SHT 1)	F-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 13 REACTOR ENCLOSURE COOLING WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-13-106	2	M-13 (SHT 1)	G-5	A	A	4.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	13-VCS-1	PENT. X-23
HV-13-107	2	M-13 (SHT 1)	H-7	A	A	4.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	13-VCS-1	PENT. X-24
HV-13-108	2	M-13 (SHT 1)	G-5	A	A	3.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	13-VCS-1	PENT. X-23
HV-13-109	2	M-13 (SHT 1)	G-5	A	P	3.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-23, ELECTRICALLY DISCONNECTED
HV-13-110	2	M-13 (SHT 1)	G-8	A	P	3.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-24, ELECTRICALLY DISCONNECTED
HV-13-111	2	M-13 (SHT 1)	G-7	A	A	3.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	13-VCS-1	PENT. X-24
PSV-13-102	2	M-13 (SHT 1)	H-7	A	A	1.00	RL	SA	C	O	-	N	RP-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 15 COMPRESSED AIR

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
15-1139	2	M-15 (SHT 15)	F-4	A	P	3.00	GT	MA	LC	C	AI	Y	LJ-B		PENT. X-21
15-1140	2	M-15 (SHT 15)	F-4	A	P	3.00	GT	MA	LC	C	AI	Y	LJ-B		PENT. X-21
15-1412A	SR	M-15 (SHT 15)	A-5	A/C	A	0.75	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO. 1
15-1412B	SR	M-15 (SHT 16)	G-2	A/C	A	0.75	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO. 2
15-1412C	SR	M-15 (SHT 16)	E-2	A/C	A	0.75	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		INFLATABLE SEAL NO. 3
15-1412D	SR	M-15 (SHT 16)	C-2	A/C	A	0.75	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		INFLATABLE SEAL NO. 4
15-1412G	SR	M-15 (SHT 15)	C-5	A/C	A	0.75	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO. 7
15-1412K	SR	M-15 (SHT 16)	C-4	A/C	A	0.75	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO. 10

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 15 COMPRESSED AIR

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
15-1413A	SR	M-15 (SHT 15)	A-6	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 1
15-1413B	SR	M-15 (SHT 16)	G-1	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 2
15-1413C	SR	M-15 (SHT 16)	E-1	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 3
15-1413D	SR	M-15 (SHT 16)	C-1	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 4
15-1413G	SR	M-15 (SHT 15)	D-5	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 7
15-1413K	SR	M-15 (SHT 16)	C-4	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 10
15-1886A	SR	M-15 (SHT 15)	B-6	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO.1
15-1886B	SR	M-15 (SHT 16)	G-1	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO.2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 15 COMPRESSED AIR

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
15-1886C	SR	M-15 (SHT 16)	E-1	A/C	A	0.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C), LP-T		INFLATABLE SEAL NO.3
15-1886D	SR	M-15 (SHT 16)	C-1	A/C	A	0.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C), LP-T		INFLATABLE SEAL NO.4
15-1886G	SR	M-15 (SHT 15)	D-6	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO.7
15-1886K	SR	M-15 (SHT 16)	C-4	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO.10
PSV-15-149A	SR	M-15 (SHT 15)	B-6	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 1
PSV-15-149B	SR	M-15 (SHT 16)	G-1	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 2
PSV-15-149C	SR	M-15 (SHT 16)	F-2	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 3
PSV-15-149D	SR	M-15 (SHT 16)	C-2	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 4

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 15 COMPRESSED AIR

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-15-149G	SR	M-15 (SHT 15)	D-5	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 7
PSV-15-149K	SR	M-15 (SHT 16)	C-4	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 10

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
20-1046A	3	M-20 (SHT 3)	D-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1046B	3	M-20 (SHT 3)	D-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1046C	3	M-20 (SHT 3)	D-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1046D	3	M-20 (SHT 3)	D-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1054A	3	M-20 (SHT 3)	F-6		A	0.75	CK	SA	OC	C	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1054B	3	M-20 (SHT 3)	F-6		A	0.75	CK	SA	OC	C	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1054C	3	M-20 (SHT 3)	F-6		A	0.75	CK	SA	OC	C	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1054D	3	M-20 (SHT 3)	F-6		A	0.75	CK	SA	OC	C	-	N			SKID MOUNTED TP-EXE-IST-00-04

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
20-1055A	3	M-20 (SHT 3)	G-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1055B	3	M-20 (SHT 3)	G-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1055C	3	M-20 (SHT 3)	G-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1055D	3	M-20 (SHT 3)	G-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1118A	3	M-20 (SHT 6)	B-5	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-1118B	3	M-20 (SHT 6)	B-5	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-1118C	3	M-20 (SHT 6)	B-5	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-1118D	3	M-20 (SHT 6)	B-5	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
20-1122A	3	M-20 (SHT 6)	B-4	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-1122B	3	M-20 (SHT 6)	B-4	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-1122C	3	M-20 (SHT 6)	B-4	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-1122D	3	M-20 (SHT 6)	B-4	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-1162A	3	M-20 (SHT 3)	H-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1162B	3	M-20 (SHT 3)	H-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1162C	3	M-20 (SHT 3)	H-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-1162D	3	M-20 (SHT 3)	H-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04

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INSERVICE TESTING VALVE TABLE

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
92-1302A	3	M-20 (SHT 6)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-1302B	3	M-20 (SHT 6)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-1302C	3	M-20 (SHT 6)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-1302D	3	M-20 (SHT 6)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-1303A	3	M-20 (SHT 6)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-1303B	3	M-20 (SHT 6)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-1303C	3	M-20 (SHT 6)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-1303D	3	M-20 (SHT 6)	F -5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-020-128A-1	3	M-20 (SHT 6)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-128A-2	3	M-20 (SHT 6)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-128B-1	3	M-20 (SHT 6)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-128B-2	3	M-20 (SHT 6)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-128C-1	3	M-20 (SHT 6)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-128C-2	3	M-20 (SHT 6)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-128D-1	3	M-20 (SHT 6)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-128D-2	3	M-20 (SHT 6)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 26 PLANT PROCESS RADIATION MONITORING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-26-190A	2	M-26 (SHT 2)	G-3	A	A	1.00	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-117B-1
SV-26-190B	2	M-26 (SHT 2)	F-3	A	A	1.00	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-117B-1
SV-26-190C	2	M-26 (SHT 2)	G-4	A	A	1.00	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-117B-2
SV-26-190D	2	M-26 (SHT 2)	F-4	A	A	1.00	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-117B-2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
41-1016	1	M-41 (SHT 1)	F-4	A	P	4.00	GL	MA	LC	C	AI	Y	LJ-B		PENT. X-44
41-1017	1	M-41 (SHT 1)	F-4	A	P	4.00	GL	MA	LC	C	AI	Y	LJ-B		PENT. X-44
41-1036A	1	M-41 (SHT 1)	D-5	A/C	A	1.00	CK	SA	C	OC	-	Y	ET-C(O&C), LJ-B	41-VCS-4	PENT. X-9A
41-1036B	1	M-41 (SHT 1)	B-4	A/C	A	1.00	CK	SA	C	OC	-	Y	ET-C(O&C), LJ-B	41-VCS-4	PENT. X-9B
41-1F010A	1	M-41 (SHT 1)	D-4	A/C	A	24.00	CK	SA	O	OC	-	Y	ET-Q(O), ET-R(C), LJ-B	41-ROJ-1	PENT. X-9A
41-1F010B	1	M-41 (SHT 1)	C-4	A/C	A	24.00	CK	SA	O	OC	-	Y	ET-Q(O), ET-R(C), LJ-B	41-ROJ-1	PENT. X-9B
41-1F024A	3	M-41 (SHT 2)	G-5	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-3	
41-1F024B	3	M-41 (SHT 2)	G-5	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-3	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
41-1F024C	3	M-41 (SHT 2)	G-5	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-3	
41-1F024D	3	M-41 (SHT 2)	G-5	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-3	
41-1F029A	3	M-41 (SHT 2)	G-4	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-4	
41-1F029B	3	M-41 (SHT 2)	G-4	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-4	
41-1F029C	3	M-41 (SHT 2)	G-4	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-4	
41-1F029D	3	M-41 (SHT 2)	G-4	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-4	
41-1F036E	3	M-41 (SHT 2)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	
41-1F036H	3	M-41 (SHT 2)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
41-1F036K	3	M-41 (SHT 2)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	
41-1F036M	3	M-41 (SHT 2)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	
41-1F036S	3	M-41 (SHT 2)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	
HV-41-109A	2	M-41 (SHT 1)	D-7	A	P	16.00	GT	MO	LC	C	AI	Y	LJ-B, PI-T		PENT. X-9A
HV-41-109B	2	M-41 (SHT 1)	D-7	A	P	16.00	GT	MO	LC	C	AI	Y	LJ-B, PI-T		PENT. X-9B
HV-41-130A	1	M-41 (SHT 1)	B-5	A	A	1.50	GL	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	41-VCS-3	PENT. X-9B
HV-41-130B	1	M-41 (SHT 1)	C-5	A	A	1.50	GL	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	41-VCS-3	PENT. X-9A
HV-41-133A	1	M-41 (SHT 1)	B-5	A	A	1.50	GL	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	41-VCS-3	PENT. X-9A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-41-133B	1	M-41 (SHT 1)	B-5	A	A	1.50	GL	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	41-VCS-3	PENT. X-9B
HV-41-140	SR	M-41 (SHT 2)	D-3	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-41-141	SR	M-41 (SHT 2)	D-2	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-41-142	SR	M-41 (SHT 2)	D-2	B	A	3.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-41-143	SR	M-41 (SHT 2)	D-2	B	A	3.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-41-1F001	1	M-41 (SHT 1)	H-3	B	P	2.00	GL	MO	C	C	AI	N	PI-T		
HV-41-1F002	1	M-41 (SHT 1)	H-3	B	P	2.00	GL	MO	C	C	AI	N	PI-T		

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LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-41-1F016	1	M-41 (SHT 2)	D-5	A	A	3.00	GT	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-8
HV-41-1F019	1	M-41 (SHT 2)	D-5	A	A	3.00	GT	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-8
HV-41-1F021	SR	M-41 (SHT 2)	D-1	B	A	3.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-41-1F022A	1	M-41 (SHT 2)	F-5	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7A
HV-41-1F022B	1	M-41 (SHT 2)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7B
HV-41-1F022C	1	M-41 (SHT 2)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7C
HV-41-1F022D	1	M-41 (SHT 2)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7D

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-41-1F028A	1	M-41 (SHT 2)	F-5	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7A
HV-41-1F028B	1	M-41 (SHT 2)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7B
HV-41-1F028C	1	M-41 (SHT 2)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7C
HV-41-1F028D	1	M-41 (SHT 2)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7D
HV-41-1F032A	2	M-41 (SHT 1)	D-7	A/C	A	24.00	SK	SA	O	C	-	Y	BD-Q(O), ET-R(C), LJ-B, PI-T	41-ROJ-1	PENT. X-9A
HV-41-1F032B	2	M-41 (SHT 1)	C-8	A/C	A	24.00	SK	SA	O	C	-	Y	BD-Q(O), ET-R(C), LJ-B, PI-T	41-ROJ-1	PENT. X-9B
HV-41-1F074A	1	M-41 (SHT 1)	D-4	A/C	A	24.00	TC	SA	O	OC	-	Y	ET-Q(O), ET-C(C), LJ-B, PI-T	41-VCS-1	PENT. X-9A
HV-41-1F074B	1	M-41 (SHT 1)	C-4	A/C	A	24.00	TC	SA	O	OC	-	Y	ET-Q(O), ET-C(C), LJ-B, PI-T	41-VCS-1	PENT. X-9B

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LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-41-1F084	1	M-41 (SHT 2)	B-5	A	A	1.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-43B
HV-41-1F085	1	M-41 (SHT 2)	B-4	A	A	1.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-43B
HV-C-41-1F020	2	M-41 (SHT 2)	D-3	B	A	2.00	GL	MO	O	O	AI	N	ET-Q, ST-Q(O), PI-T		
PSV-41-112	1	M-41 (SHT 1)	E-5	A/C	A	0.75	RL	SA	C	OC	-	Y	RT-P2, LJ-B		PENT. X-44
PSV-41-134A	2	M-41 (SHT 1)	B-6	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-41-134B	2	M-41 (SHT 1)	C-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-41-1F013A	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-1F013B	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		

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LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-1F013C	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-1F013D	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-1F013E	1	M-41 (SHT 2)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		
PSV-41-1F013F	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-1F013G	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-1F013H	1	M-41 (SHT 2)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		
PSV-41-1F013J	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-1F013K	1	M-41 (SHT 2)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-1F013L	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-1F013M	1	M-41 (SHT 2)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		
PSV-41-1F013N	1	M-41 (SHT 2)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-1F013S	1	M-41 (SHT 2)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		
PSV-41-1F037A	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037B	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037C	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037D	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-1F037E	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037F	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037G	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037H	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037J	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037K	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037L	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037M	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-1F037N	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F037S	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097A	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097B	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097C	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097D	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097E	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097F	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-1F097G	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097H	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097J	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097K	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097L	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097M	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097N	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-1F097S	3	M-41 (SHT 2)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 42 NUCLEAR BOILER VESSEL INSTRUMENTATION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
42-1044A	2	M-42 (SHT 5)	C-6	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-67B
42-1044B	2	M-42 (SHT 5)	E-6	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-65A
42-1044C	2	M-42 (SHT 5)	F-6	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-65B
42-1044D	2	M-42 (SHT 5)	G-6	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-67A
42-1046A	2	M-42 (SHT 5)	C-5	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-67B
42-1046B	2	M-42 (SHT 5)	E-5	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-65A
42-1046C	2	M-42 (SHT 5)	F-5	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-RC), LP-T	42-ROJ-1	PENT. X-65B
42-1046D	2	M-42 (SHT 5)	G-5	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-67A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 42 NUCLEAR BOILER VESSEL INSTRUMENTATION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-42-147A	1	M-42 (SHT 1)	B-6	B	A	1.50	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	42-VCS-1	PENT. X-30B-1
HV-42-147B	1	M-42 (SHT 1)	B-4	B	A	1.50	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	42-VCS-1	PENT. X-50A
HV-42-147C	1	M-42 (SHT 1)	A-6	B	A	1.50	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	42-VCS-1	PENT. X-22
HV-42-147D	1	M-42 (SHT 1)	A-4	B	A	1.50	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	42-VCS-1	PENT. X-40E

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: **43** REACTOR RECIRCULATION PUMP

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
43-1004A	1	M-43 (SHT 1)	C-7	A/C	A	1.00	CK	SA	O	C	-	Y	BD-Q(O), ET-R(C), LJ-B	43-ROJ-1	PENT. X-61-1
43-1004B	1	M-43 (SHT 1)	B-7	A/C	A	1.00	CK	SA	O	C	-	Y	BD-Q(O), ET-R(C), LJ-B	43-ROJ-1	PENT. X-61-2
HV-43-1F019	1	M-43 (SHT 1)	G-4	A	A	1.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-28A-1
HV-43-1F020	1	M-43 (SHT 1)	G-2	A	A	1.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-28A-1

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 44 REACTOR WATER CLEANUP

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-44-1F001	1	M-44 (SHT 1)	E-7	A	A	6.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	44-VCS-1	PENT X-14
HV-44-1F004	1	M-44 (SHT 1)	E-6	A	A	6.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	44-VCS-1	PENT X-14
HV-44-1F039	2	M-44 (SHT 2)	H-7	A/C	A	4.00	TC	SA	O	C	-	Y	BD-Q(O), ET-C(C), LJ-B	44-VCS-2	PENT X-9A, X-9B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 46 CONTROL ROD DRIVE HYDRAULIC - PART A

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
46-1101	2	M-46 (SHT 1)	E-2	A/C	A	2.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-37A
46-1102	2	M-46 (SHT 1)	E-2	A/C	A	2.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-37B
46-1108	2	M-46 (SHT 1)	F-5	A/C	A	2.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-37C
46-1109	2	M-46 (SHT 1)	F-5	A/C	A	2.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-37D
46-1115	2	M-46 (SHT 1)	F-2	A/C	A	1.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-38A
46-1116	2	M-46 (SHT 1)	F-2	A/C	A	1.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-38B
46-1122	2	M-46 (SHT 1)	G-7	A/C	A	1.00	CK	SA	O	C	-	Y	BD-Q(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-38C
46-1123	2	M-46 (SHT 1)	G-6	A/C	A	1.00	CK	SA	O	C	-	Y	BD-Q(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-38D

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 46 CONTROL ROD DRIVE HYDRAULIC - PART A

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-46-125	SR	M-46 (SHT 1)	C-3	B	A	1.00	GL	MO	C	O	AI	N	ET-R, ST-R(O), PI-T	46-ROJ-1	
HV-46-126	SR	M-46 (SHT 1)	C-3	B	A	1.00	GL	MO	C	O	AI	N	ET-R, ST-R(O), PI-T	46-ROJ-1	
HV-46-127	SR	M-46 (SHT 1)	C-4	B	A	1.00	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	46-VCS-2	
HV-46-128	SR	M-46 (SHT 1)	C-4	B	A	1.00	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	46-VCS-2	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 47 CONTROL ROD DRIVE HYDRAULIC - PART B

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
47-1-14(x-y)	2	M-47 (SHT 1)	D-6	C	A	0.75	CK	SA	C	O	-	N	BD-R(C), ET-R(O)	47-VRR-2	Typ. of 185 GL 89-04, Pos.7
47-1-15(x-y)	2	M-47 (SHT 1)	B-4	A/C	A	0.50	CK	SA	OC	C	-	N	BD-C(O), ET-C(C), LP-T	47-VCS-1	Typ. of 185
47-1-38(x-y)	2	M-47 (SHT 1)	B-6	C	A	0.50	CK	SA	O	C	-	N	BD-Q(O), ET-Q(C)		Typ. of 185
XV-47-1-26(x-y)	2	M-47 (SHT 1)	B-5	B	A	0.50	GL	AO	C	O	O	N	ET-R, FS-R(O), ST-R(O), PI-T	47-VRR-2	Typ. of 185 GL 89-04, Pos.7
XV-47-1-27(x-y)	2	M-47 (SHT 1)	D-6	B	A	0.75	GL	AO	C	O	O	N	ET-R, FS-R(O), ST-R(O), PI-T	47-VRR-2	Typ. of 185 GL 89-04, Pos.7
XV-47-1F010	2	M-47 (SHT 1)	H-4	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-38
XV-47-1F011	2	M-47 (SHT 1)	D-6	A	A	2.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-38
XV-47-1F180	2	M-47 (SHT 1)	H-4	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-38
XV-47-1F181	2	M-47 (SHT 1)	D-6	A	A	2.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-38

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 48 STANDBY LIQUID CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
48-1027	1	M-48 (SHT 1)	G-8	C	A	2.00	CK	SA	C	O	-	N	BD-R(C), ET-R(O)	48-ROJ-1	
48-1F007	1	M-48 (SHT 1)	F-8	A/C	A	2.00	CK	SA	C	OC	-	Y	ET-R(O&C), LJ-B	48-ROJ-1	PENT. X-42, 116
48-1F033A	2	M-48 (SHT 1)	E-6	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C)		
48-1F033B	2	M-48 (SHT 1)	C-6	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C)		
48-1F033C	2	M-48 (SHT 1)	B-6	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C)		
48-1F036	1	M-48 (SHT 1)	F-8	B	P	2.00	GL	MA	LO	O	AI	N	PI-T		
HV-48-1F006A	1	M-48 (SHT 1)	E-8	A/C	A	2.00	SK	MO	C	OC	AI	Y	ET-R(O), ET-Q(C), ST-Q(O&C), LJ-B, PI-T	48-ROJ-1	PENT. X-42. MOTOR OPERATOR NORMALLY OPEN
HV-48-1F006B	1	M-48 (SHT 1)	D-8	A/C	A	2.00	SK	MO	C	OC	AI	Y	ET-R(O), ET-Q(C), ST-Q(O&C), LJ-B, PI-T	48-ROJ-1	PENT. X-116. MOTOR OPERATOR NORMALLY OPEN

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 48 STANDBY LIQUID CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-48-1F029A	2	M-48 (SHT 1)	E-6	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-48-1F029B	2	M-48 (SHT 1)	D-6	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-48-1F029C	2	M-48 (SHT 1)	B-6	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
XV-48-1F004A	2	M-48 (SHT 1)	E-7	D	A	1.50	EX	EX	C	O	AI	N	XT-P4		
XV-48-1F004B	2	M-48 (SHT 1)	C-7	D	A	1.50	EX	EX	C	O	AI	N	XT-P4		
XV-48-1F004C	2	M-48 (SHT 1)	B-7	D	A	1.50	EX	EX	C	O	AI	N	XT-P4		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
49-1017	2	M-49 (SHT 1)	A-8	C	A	3.00	CK	SA	OC	OC	-	N	ET-Q(O&C,), DI-P6, PT-DI@,		**Condition Monitoring** U/1 RCIC Grp3
49-1018	2	M-49 (SHT 1)	A-8	C	A	3.00	CK	SA	OC	OC	-	N	ET-Q(O&C,), DI-P6, PT-DI@,		**Condition Monitoring** U/1 RCIC Grp3
49-1032	2	M-49 (SHT 1)	C-3	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C,)		
49-1033	2	M-49 (SHT 1)	C-3	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C,)		
49-1F001	2	M-49 (SHT 1)	B-4	C	A	8.00	SK	SA	OC	O	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/1 RCIC Grp2
49-1F011	2	M-49 (SHT 1)	E-2	C	A	6.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/1 RCIC Grp1
49-1F014	2	M-49 (SHT 1)	D-3	C	A	6.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
49-1F028	2	M-49 (SHT 1)	B-2	A/C	A	1.00	CK	SA	C	C	-	Y	BD-Q(O), ET-C(C), LJ-B	49-VCS-3	PENT. X-217

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
49-1F030	2	M-49 (SHT 1)	A-6	C	A	6.00	CK	SA	C	O	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/1 RCIC Grp1
49-1F064	2	M-49 (SHT 1)	B-4	C	A	2.00	CK	SA	OC	C	-	N	BD-C(O), ET-C(C)	,49-VCS-4	
49-1F065	2	M-49 (SHT 1)	B-4	C	A	2.00	CK	SA	OC	C	-	N	BD-C(O), ET-C(C)	,49-VCS-4	
49-1F068	2	M-49 (SHT 1)	A-8	C	A	3.00	CK	SA	OC	OC	-	N	ET-Q(O&C,), DI-P6, PT-DI@		**Condition Monitoring** U/1 RCIC Grp3
49-1F081	2	M-49 (SHT 1)	A-8	C	A	3.00	CK	SA	OC	OC	-	N	ET-Q(O&C,), DI-P6, PT-DI@		**Condition Monitoring** U/1 RCIC Grp3
HV-49-1F002	2	M-49 (SHT 1)	B-5	A/C	A	2.00	SK	MO	OC	C	AI	Y	BD-Q(O), ET-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-217
HV-49-1F007	1	M-49 (SHT 1)	F-6	A	A	3.00	GL	MO	O	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	49-VCS-1	PENT. X-10
HV-49-1F008	1	M-49 (SHT 1)	F-5	A	A	3.00	GL	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-10

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-49-1F010	2	M-49 (SHT 1)	E-2	B	A	6.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-49-1F012	2	M-49 (SHT 1)	D-4	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
HV-49-1F013	2	M-49 (SHT 1)	D-4	A	A	6.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-9B
HV-49-1F019	2	M-49 (SHT 1)	C-5	B	A	2.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-216
HV-49-1F022	2	M-49 (SHT 1)	E-4	B	A	4.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-49-1F025	2	M-49 (SHT 1)	C-2	B	A	1.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-49-1F026	2	M-49 (SHT 1)	B-2	B	A	1.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-49-1F029	2	M-49 (SHT 1)	A-5	B	A	6.00	GT	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-49-1F031	2	M-49 (SHT 1)	A-6	B	A	6.00	GT	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-214
HV-49-1F060	2	M-49 (SHT 1)	C-5	B	A	8.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-215
HV-49-1F076	1	M-49 (SHT 1)	E-5	A	A	1.50	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-10
HV-49-1F080	2	M-49 (SHT 1)	A-7	A	A	3.00	GT	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-241
HV-49-1F084	2	M-49 (SHT 1)	C-8	A	A	3.00	GT	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-241

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LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
50-1F047	2	M-50 (SHT 1)	B-5	C	A	2.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
FV-50-113	2	M-50 (SHT 1)	F-4		A	4.00	GL	HYD	OC	O	O	N			SKID MOUNTED TP-EXE-IST-00-04
HV-50-112	2	M-50 (SHT 1)	F-3		P	4.00	GL	MO	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
HV-50-1F045	2	M-50 (SHT 1)	F-2	B	A	6.00	GL	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-50-1F046	2	M-50 (SHT 1)	D-7	B	A	2.00	GL	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
PSE-50-1D001	2	M-50 (SHT 1)	F-5	D	A	8.00	RD	SA	C	O	-	N	RD-P2		
PSE-50-1D002	2	M-50 (SHT 1)	H-5	D	A	8.00	RD	SA	C	O	-	N	RD-P2		
PSV-50-1F018	2	M-50 (SHT 1)	C-6	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
51-1032A	2	M-51 (SHT 1)	G-5	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp1
51-1032B	2	M-51 (SHT 3)	G-4	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp1
51-1115A	2	M-51 (SHT 1)	A-7	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
51-1115B	2	M-51 (SHT 3)	A-2	C	A	1.50	CK	SA	C	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp2
51-1115C	2	M-51 (SHT 1)	A-6	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
51-1115D	2	M-51 (SHT 3)	A-3	C	A	1.50	CK	SA	C	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp2
51-1116A	2	M-51 (SHT 1)	A-7	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
51-1116C	2	M-51 (SHT 1)	A-6	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
51-1200A	1	M-51 (SHT 1)	E-3	A/C	A	0.75	CK	SA	C	C	-	Y	BD-R(O), ET-R(C), LJ-B, LP-T	51-ROJ-3	
51-1200B	1	M-51 (SHT 3)	E-6	A/C	A	0.75	CK	SA	C	C	-	Y	BD-R(O), ET-R(C), LJ-B, LP-T	51-ROJ-3	
51-1F031A	2	M-51 (SHT 1)	B-6	C	A	18.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
51-1F031B	2	M-51 (SHT 3)	C-3	C	A	18.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
51-1F031C	2	M-51 (SHT 1)	B-6	C	A	18.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
51-1F031D	2	M-51 (SHT 3)	B-4	C	A	18.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
51-1F046A	2	M-51 (SHT 1)	C-5	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 51-ROJ-2
51-1F046B	2	M-51 (SHT 3)	D-5	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 51-ROJ-2
51-1F046C	2	M-51 (SHT 1)	C-5	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 51-ROJ-2
51-1F046D	2	M-51 (SHT 3)	D-4	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 51-ROJ-2
51-1F065A	1	M-51 (SHT 1)	F-1	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
51-1F065B	1	M-51 (SHT 3)	F-8	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
51-1F065C	1	M-51 (SHT 1)	F-1	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
51-1F065D	1	M-51 (SHT 3)	G-8	B	P	12.00	GT	MA	LO	O	-	N	PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
51-1F090A	2	M-51 (SHT 1)	G-4	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp1
51-1F090B	2	M-51 (SHT 3)	G-4	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp1
51-1F090C	2	M-51 (SHT 1)	G-5	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp1
51-1F090D	2	M-51 (SHT 3)	G-4	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp1
HV-51-105A	2	M-51 (SHT 1)	D-3	B	A	4.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-226A
HV-51-105B	2	M-51 (SHT 3)	D-6	B	A	4.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-226B
HV-51-125A	2	M-51 (SHT 1)	D-3	B	A	18.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-204A
HV-51-125B	2	M-51 (SHT 3)	D-6	B	A	18.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-204B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-142A	1	M-51 (SHT 1)	F-2	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-45A
HV-51-142B	1	M-51 (SHT 3)	F-7	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-45B
HV-51-142C	1	M-51 (SHT 1)	F-2	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-45C
HV-51-142D	1	M-51 (SHT 3)	F-7	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-45D
HV-51-151A	1	M-51 (SHT 1)	E-3	A	P	1.50	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-13A
HV-51-151B	1	M-51 (SHT 3)	E-6	A	P	1.50	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-13B
HV-51-1F003A	2	M-51 (SHT 2)	F-5	B	P	18.00	GT	MO	O	O	AI	N	PI-T		
HV-51-1F003B	2	M-51 (SHT 4)	F-6	B	P	18.00	GT	MO	O	O	AI	N	PI-T		

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LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-1F004A	2	M-51 (SHT 1)	C-3	B	A	24.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-203A
HV-51-1F004B	2	M-51 (SHT 3)	C-6	B	A	24.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-203B
HV-51-1F004C	2	M-51 (SHT 1)	C-2	B	A	24.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-203C
HV-51-1F004D	2	M-51 (SHT 3)	C-7	B	A	24.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-203D
HV-51-1F006A	2	M-51 (SHT 1)	B-2	B	A	20.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-1F006B	2	M-51 (SHT 3)	B-7	B	A	20.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-1F007A	2	M-51 (SHT 1)	C-5	B	A	4.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-1F007B	2	M-51 (SHT 3)	C-5	B	A	4.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-1F007C	2	M-51 (SHT 1)	C-5	B	A	4.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-1F007D	2	M-51 (SHT 3)	C-4	B	A	4.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-1F008	1	M-51 (SHT 1)	E-3	A	A	20.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, LP-T, PI-T	51-VCS-2	PENT. X-12
HV-51-1F009	1	M-51 (SHT 3)	E-8	A	A	20.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, LP-T, PI-T	51-VCS-2	PENT. X-12
HV-51-1F010A	2	M-51 (SHT 1)	D-6	B	A	18.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-1F010B	2	M-51 (SHT 3)	D-4	B	A	18.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-1F014A	3	M-51 (SHT 2)	C-7	B	A	20.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-1F014B	3	M-51 (SHT 4)	D-4	B	A	20.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		

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LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-1F015A	1	M-51 (SHT 1)	E-3	A	A	12.00	GL	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-13A
HV-51-1F015B	1	M-51 (SHT 3)	F-6	A	A	12.00	GL	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-13B
HV-51-1F016A	2	M-51 (SHT 1)	G-7	A	A	16.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-39A
HV-51-1F016B	2	M-51 (SHT 3)	G-3	A	A	16.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-39B
HV-51-1F017A	1	M-51 (SHT 1)	F-3	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45A
HV-51-1F017B	1	M-51 (SHT 3)	F-6	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45B
HV-51-1F017C	1	M-51 (SHT 1)	F-3	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45C
HV-51-1F017D	1	M-51 (SHT 3)	G-6	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45D

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VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-1F021A	2	M-51 (SHT 1)	G-3	A	A	16.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-39A
HV-51-1F021B	2	M-51 (SHT 3)	G-6	A	A	16.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-39B
HV-51-1F024A	2	M-51 (SHT 1)	D-4	B	A	18.00	GL	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-1F024B	2	M-51 (SHT 3)	D-5	B	A	18.00	GL	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-1F027A	2	M-51 (SHT 1)	D-3	A	A	6.00	GL	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-205A
HV-51-1F027B	2	M-51 (SHT 3)	E-6	A	A	6.00	GL	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-205B
HV-51-1F040	2	M-51 (SHT 2)	F-3	B	A	4.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-1F041A	1	M-51 (SHT 1)	F-2	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45A

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LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-1F041B	1	M-51 (SHT 3)	F-7	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45B
HV-51-1F041C	1	M-51 (SHT 1)	F-2	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45C
HV-51-1F041D	1	M-51 (SHT 3)	G-7	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45D
HV-51-1F047A	2	M-51 (SHT 1)	C-7	B	P	18.00	GT	MO	O	O	AI	N	PI-T		
HV-51-1F047B	2	M-51 (SHT 3)	D-2	B	P	18.00	GT	MO	O	O	AI	N	PI-T		
HV-51-1F049	2	M-51 (SHT 2)	F-4	B	A	4.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-1F050A	1	M-51 (SHT 1)	E-3	A/C	A	12.00	TC	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B, LP-T	51-ROJ-1	PENT. X-13A
HV-51-1F050B	1	M-51 (SHT 3)	F-6	A/C	A	12.00	TC	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B, LP-T	51-ROJ-1	PENT. X-13B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-1F068A	3	M-51 (SHT 2)	B-4	B	A	20.00	GL	MO	OC	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-51-1F068B	3	M-51 (SHT 4)	C-6	B	A	20.00	GL	MO	OC	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-51-1F075	2	M-51 (SHT 4)	G-5	B	P	18.00	GT	MO	C	C	AI	N	PI-T		
HV-51-1F079A	2	M-51 (SHT 2)	E-6	B	A	1.00	GL	AO	OC	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-51-1F079B	2	M-51 (SHT 4)	F-4	B	A	1.00	GL	AO	OC	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-51-1F080A	2	M-51 (SHT 2)	E-7	B	A	1.00	GL	AO	OC	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-51-1F080B	2	M-51 (SHT 4)	F-3	B	A	1.00	GL	AO	OC	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-C-51-1F048A	2	M-51 (SHT 1)	E-7	B	A	18.00	BF	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-C-51-1F048B	2	M-51 (SHT 3)	E-2	B	A	18.00	BF	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-C-51-1F103A	2	M-51 (SHT 2)	C-7	A	P	1.00	GL	MO	C	C	AI	Y	LJ-B		PENT. X-239
HV-C-51-1F104B	2	M-51 (SHT 4)	D-4	A	P	1.00	GL	MO	C	C	AI	Y	LJ-B		PENT. X-238
PSV-51-105A	2	M-51 (SHT 2)	B-5	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-51-105B	2	M-51 (SHT 4)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-51-106A	2	M-51 (SHT 2)	D-6	A/C	A	0.75	RL	SA	C	OC	-	Y	RP-P3, LJ-B		PENT. X-239
PSV-51-106B	2	M-51 (SHT 4)	D-5	A/C	A	0.75	RL	SA	C	OC	-	Y	RP-P3, LJ-B		PENT. X-238
PSV-51-155	1	M-51 (SHT 1)	E-2	A/C	A	0.75	RL	SA	C	OC	-	Y	RT-P2, LJ-B		PENT. X-12

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-51-1F025A	2	M-51 (SHT 1)	G-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-1F025B	2	M-51 (SHT 3)	G-4	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-1F025C	2	M-51 (SHT 1)	G-4	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-1F025D	2	M-51 (SHT 3)	G-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-1F029	2	M-51 (SHT 1)	C-4	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-1F030A	2	M-51 (SHT 1)	C-3	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		PENT. X-203A
PSV-51-1F030B	2	M-51 (SHT 3)	C-6	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		PENT. X-203B
PSV-51-1F030C	2	M-51 (SHT 1)	C-2	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		PENT. X-203C
PSV-51-1F030D	2	M-51 (SHT 3)	C-7	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		PENT. X-203D

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
52-1045A	2	M-52 (SHT 2)	E-6	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
52-1045B	2	M-52 (SHT 2)	E-2	C	A	1.50	CK	SA	C	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp2
52-1046A	2	M-52 (SHT 2)	E-5	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
52-1048A	2	M-52 (SHT 2)	A-5	C	A	1.00	CK	SA	C	OC	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/1 GVROJ-1 Grp5
52-1048B	2	M-52 (SHT 2)	B-3	C	A	1.00	CK	SA	C	OC	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/1 GVROJ-1 Grp5
52-1051A	2	M-52 (SHT 2)	G-2	C	A	1.50	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
52-1051B	2	M-52 (SHT 2)	F-2	C	A	1.50	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
52-1061	2	M-52 (SHT 2)	B-2	C	A	1.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp6
52-1F003A	2	M-52 (SHT 2)	D-6	C	A	12.00	CK	SA	OC	OC	-	N	ET-QO&C)		
52-1F003B	2	M-52 (SHT 2)	D-3	C	A	12.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
52-1F003C	2	M-52 (SHT 2)	D-5	C	A	12.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
52-1F003D	2	M-52 (SHT 2)	D-1	C	A	12.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
52-1F007A	1	M-52 (SHT 1)	E-7	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
52-1F007B	1	M-52 (SHT 1)	F-7	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
52-1F030A	2	M-52 (SHT 1)	G-4	C	A	2.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp3

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
52-1F030B	2	M-52 (SHT 1)	H-4	C	A	2.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp3
52-1F036A	2	M-52 (SHT 2)	D-7	C	A	3.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
52-1F036B	2	M-52 (SHT 2)	D-3	C	A	3.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
52-1F036C	2	M-52 (SHT 2)	D-5	C	A	3.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
52-1F036D	2	M-52 (SHT 2)	D-1	C	A	3.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
HV-52-108	1	M-52 (SHT 1)	F-6	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-R(O&C), LJ-B, LP-T, PI-T	52-ROJ-1	PENT. X-16B
HV-52-127	2	M-52 (SHT 2)	G-7	A	A	6.00	GT	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-237
HV-52-128	2	M-52 (SHT 2)	G-7	A	A	6.00	GT	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-237

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-52-139	2	M-52 (SHT 1)	A-7	B	A	1.00	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-237
HV-52-1F001A	2	M-52 (SHT 1)	B-6	B	A	16.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-206A
HV-52-1F001B	2	M-52 (SHT 1)	B-8	B	A	16.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-206B
HV-52-1F001C	2	M-52 (SHT 1)	B-6	B	A	16.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-206C
HV-52-1F001D	2	M-52 (SHT 1)	B-8	B	A	16.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-206D
HV-52-1F004A	2	M-52 (SHT 1)	E-5	B	A	12.00	GT	MO	OC	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-52-1F004B	2	M-52 (SHT 1)	F-4	B	A	12.00	GT	MO	OC	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-52-1F005	1	M-52 (SHT 1)	E-6	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	52-VCS-1	PENT. X-16A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-52-1F006A	1	M-52 (SHT 1)	E-6	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	52-VCS-1	PENT. X-16A
HV-52-1F006B	1	M-52 (SHT 1)	F-6	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	52-VCS-1	PENT. X-16B
HV-52-1F015A	2	M-52 (SHT 1)	D-6	B	A	10.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-207A
HV-52-1F015B	2	M-52 (SHT 1)	D-6	B	A	10.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-207B
HV-52-1F031A	2	M-52 (SHT 1)	C-6	B	A	4.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-235
HV-52-1F031B	2	M-52 (SHT 1)	C-6	B	A	4.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-208B
HV-52-1F037	2	M-52 (SHT 1)	F-5	B	A	12.00	GT	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-52-1F039A	1	M-52 (SHT 1)	E-6	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-16A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-52-1F039B	1	M-52 (SHT 1)	F-6	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-16B
PSV-52-127	2	M-52 (SHT 2)	G-7	A/C	A	0.75	RL	SA	C	OC	-	Y	RP-P3, LJ-B		PENT. X-237
PSV-52-1F012A	2	M-52 (SHT 2)	F-7	C	A	2.00	RL	SA	C	OC	-	N	RT-P3		
PSV-52-1F012B	2	M-52 (SHT 2)	F-3	C	A	2.00	RL	SA	C	OC	-	N	RT-P3		
PSV-52-1F032A	2	M-52 (SHT 2)	B-8	C	A	2.00	RL	SA	C	OC	-	N	RP-P3		
PSV-52-1F032B	2	M-52 (SHT 2)	B-4	C	A	2.00	RL	SA	C	OC	-	N	RP-P3		
PSV-52-1F032C	2	M-52 (SHT 2)	B-6	C	A	2.00	RL	SA	C	OC	-	N	RP-P3		
PSV-52-1F032D	2	M-52 (SHT 2)	B-3	C	A	2.00	RL	SA	C	OC	-	N	RP-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-52-139	2	M-52 (SHT 1)	A-7	B	A	1.00	GL	SO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		PENT. X-237

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 53 FUEL POOL COOLING AND CLEANUP

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
53-1093	3	M-53 (SHT 1)	G-2	B	A	2.00	GL	MA	C	O	-	N	ET-T		SPENT FUEL POOL MAKEUP, FSAR 9.1.3.3, FSAR
53-1094	3	M-53 (SHT 1)	G-2	B	A	2.00	GL	MA	C	O	-	N	ET-T		SPENT FUEL POOL MAKEUP, FSAR 9.1.3.3, FSAR

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
55-1025	2	M-55 (SHT 1)	A-8	C	A	4.00	CK	SA	OC	OC	-	N	ET-Q(O&C), DI- P6, PT-DI@		**Condition Monitoring** U/1 HPCI Grp2
55-1026	2	M-55 (SHT 1)	A-7	C	A	4.00	CK	SA	OC	OC	-	N	ET-Q(O&C), DI- P6, PT-DI@		**Condition Monitoring** U/1 HPCI Grp2
55-1048	2	M-55 (SHT 1)	D-4	C	A	1.50	CK	SA	OC	OC	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp4
55-1049	2	M-55 (SHT1)	C-4	C	A	1.50	CK	SA	OC	OC	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp4
55-1058	2	M-55 (SHT 1)	F-4	C	A	8.00	CK	SA	C	O	-	N	DI- P6		**Condition Monitoring** U/1 55-ROJ-2
55-1059	2	M-55 (SHT 1)	D-5	C	A	12.00	CK	SA	C	O	-	N	DI- P6		**Condition Monitoring** U/1 55-ROJ-2
55-1F005	2	M-55 (SHT 1)	D-4	C	A	14.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
55-1F019	2	M-55 (SHT 1)	F-3	C	A	16.00	CK	SA	OC	O	-	N	DI- P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/1 55-ROJ-1

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
55-1F021	2	M-55 (SHT 1)	C-4	C	A	12.00	SK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)	55-VCS-3	**Condition Monitoring**
55-1F045	2	M-55 (SHT 1)	B-6	C	A	16.00	CK	SA	C	O	-	N	DI- P6, PT-DI@, PT-Q		**Condition Monitoring** U/1 55-ROJ-1
55-1F046	2	M-55 (SHT 1)	C-3	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/1 HPCI Grp1
55-1F078	2	M-55 (SHT 1)	B-5	C	A	2.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/1 GVROJ-1 Grp3
55-1F080	2	M-55 (SHT 1)	A-8	C	A	4.00	CK	SA	OC	OC	-	N	ET-Q(O&C), DI- P6, PT-DI@		**Condition Monitoring** U/1 HPCI Grp2
55-1F094	2	M-55 (SHT 1)	A-7	C	A	4.00	CK	SA	OC	OC	-	N	ET-Q(O&C), DI- P6, PT-DI@		**Condition Monitoring** U/1 HPCI Grp2
HV-55-120	2	M-55 (SHT 1)	B-6	B	A	2.00	GL	MO	O	OC	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-219B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-55-121	2	M-55 (SHT 1)	B-6	B	A	0.75	GL	MO	O	OC	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-219A
HV-55-126	2	M-55 (SHT 1)	A-6	B	A	0.75	GL	MO	O	OC	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-219A
HV-55-1F001	2	M-55 (SHT 1)	D-2	B	A	12.00	GT	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-55-1F002	1	M-55 (SHT 1)	F-6	A	A	10.00	GL	MO	O	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	55-VCS-1	PENT. X-11
HV-55-1F003	1	M-55 (SHT 1)	F-6	A	A	10.00	GL	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-11
HV-55-1F004	2	M-55 (SHT 1)	F-3	B	A	16.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-55-1F006	2	M-55 (SHT 1)	D-5	B	A	12.00	GT	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-55-1F007	2	M-55 (SHT 1)	D-4	B	P	14.00	GT	MO	O	O	AI	N	PI-T		

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-55-1F008	2	M-55 (SHT 1)	E-4	B	A	10.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-55-1F011	2	M-55 (SHT 1)	G-4	B	A	10.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-55-1F012	2	M-55 (SHT 1)	C-6	B	A	4.00	GL	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-236
HV-55-1F028	2	M-55 (SHT 1)	C-2	B	A	1.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-55-1F029	2	M-55 (SHT 1)	B-2	B	A	1.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-55-1F041	2	M-55 (SHT 1)	E-3	B	A	16.00	BF	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-55-1F042	2	M-55 (SHT 1)	B-7	B	A	16.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-209
HV-55-1F071	2	M-55 (SHT 1)	C-6	B	A	4.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-212

IST Program Plan
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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-55-1F072	2	M-55 (SHT 1)	C-6	B	A	12.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-210
HV-55-1F093	2	M-55 (SHT 1)	A-6	A	A	4.00	GT	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-228D
HV-55-1F095	2	M-55 (SHT 1)	C-8	A	A	4.00	GT	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-228D
HV-55-1F100	1	M-55 (SHT 1)	F-6	A	A	1.50	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-11
HV-55-1F105	2	M-55 (SHT 1)	F-4	A	A	8.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-9A

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
56-1F048	2	M-56 (SHT 1)	B-5	C	A	2.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
56-1F057	2	M-56 (SHT 1)	B-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
FV-56-111	2	M-56 (SHT 1)	G-3		A	10.00	GL	HYD	C	O	C	N			SKID MOUNTED TP-EXE-IST-00-04
FV-56-112	2	M-56 (SHT 1)	G-3		A	10.00	GL	HYD	C	OC	C	N			SKID MOUNTED TP-EXE-IST-00-04
HV-56-1F059	2	M-56 (SHT 1)	D-6	B	A	2.00	GL	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
PSE-56-1D003	2	M-56 (SHT 1)	F-4	D	A	16.00	RD	SA	C	O	-	N	RD-P2		
PSE-56-1D004	2	M-56 (SHT 1)	H-4	D	A	16.00	RD	SA	C	O	-	N	RD-P2		
PSV-56-1F020	2	M-56 (SHT 1)	G-6	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-56-1F050	2	M-56 (SHT 1)	C-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
FV-DO-101A	2	M-58 (SHT1)	C-7	A	A	4.00	GL	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-26
FV-DO-101B	2	M-58 (SHT 2)	C-7	A	A	4.00	GL	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-25
HV-57-104	2	M-57 (SHT 2)	E-7	A	A	18.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-202
HV-57-105	2	M-57 (SHT 2)	D-6	A	A	2.00	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-202

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-57-109	2	M-57 (SHT 1)	E-5	A	A	6.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-25, X-201A
HV-57-110A	2	M-57 (SHT 2)	E-8	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-110B	2	M-57 (SHT 1)	F-2	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-111	2	M-57 (SHT 2)	G-5	A	A	2.00	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-26
HV-57-112	2	M-57 (SHT 2)	F-7	A	A	18.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-202
HV-57-114	2	M-57 (SHT 2)	F-6	A	A	24.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-26

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-57-115	2	M-57 (SHT 2)	G-6	A	A	24.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-26
HV-57-116	2	M-57 (SHT 1)	F-5	A	A	1.50	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-62
HV-57-117	2	M-57 (SHT 2)	G-5	A	A	2.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B PI-T,		PENT. X-26
HV-57-118	2	M-57 (SHT 2)	E-6	A	A	2.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-202
HV-57-121	2	M-57 (SHT 1)	D-5	A	A	6.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-25, X-201A
HV-57-123	2	M-57 (SHT 1)	D-4	A	A	24.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-25
HV-57-124	2	M-57 (SHT 1)	D-4	A	A	24.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-201A
HV-57-131	2	M-57 (SHT 1)	D-5	A	A	6.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-201A, X-25

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-57-135	2	M-57 (SHT 1)	D-4	A	A	24.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-25
HV-57-147	2	M-57 (SHT 1)	D-3	A	A	24.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-201A
HV-57-160A	3	M-57 (SHT 1)	G-5	B	A	6.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C),PI-T		
HV-57-160B	3	M-57 (SHT 1)	G-5	B	A	6.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C),PI-T		
HV-57-161	2	M-57 (SHT 2)	E-7	A	A	4.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-26
HV-57-162	2	M-57 (SHT 2)	C-6	A	A	6.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-202
HV-57-163	2	M-57 (SHT 1)	D-3	A	A	4.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-25
HV-57-164	2	M-57 (SHT 1)	C-3	A	A	6.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-201A

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-57-165	3	M-57 (SHT 1)	G-6	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-166	2	M-57 (SHT 2)	C-7	A	A	6.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-202
HV-57-167	3	M-57 (SHT 1)	F-6	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-168A	2	M-57 (SHT 2)	E-8	B	A	1.50	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-168B	2	M-57 (SHT 1)	F-2	B	A	1.50	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-169	2	M-57 (SHT 1)	B-3	A	A	6.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-201A
PSV-57-137A-1	2	M-57 (SHT 2)	G-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-137A-2	2	M-57 (SHT 2)	G-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-57-137B-1	2	M-57 (SHT 2)	E-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-137B-2	2	M-57 (SHT 2)	E-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-137C-1	2	M-57 (SHT 2)	C-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-137C-2	2	M-57 (SHT 2)	C-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-137D-1	2	M-57 (SHT 2)	A-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-137D-2	2	M-57 (SHT 2)	A-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-162	2	M-57 (SHT 2)	C-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-57-164	2	M-57 (SHT 1)	A-3	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-57-101	2	M-57 (SHT 1)	B-6	B	A	2.00	GL	SO	O	OC	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		PENT. X-220B
SV-57-132	2	M-57 (SHT 1)	E-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28A-2
SV-57-133	2	M-57 (SHT 1)	E-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28B
SV-57-134	2	M-57 (SHT 1)	E-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28A-3
SV-57-139	2	M-57 (SHT 2)	G-6	B	A	0.50	GL	SO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		PENT. X-26
SV-57-141	2	M-57 (SHT 1)	A-5	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-221A
SV-57-142	2	M-57 (SHT 1)	A-4	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28A-2
SV-57-143	2	M-57 (SHT 1)	A-4	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-57-144	2	M-57 (SHT 1)	A-4	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28A-3
SV-57-145	2	M-57 (SHT 1)	B-3	A	A	0.50	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-26
SV-57-146A	2	M-57 (SHT 2)	A-6	B	P	0.50	GL	SO	C	C	C	N	PI-T		
SV-57-146B	2	M-57 (SHT 1)	A-5	B	P	0.50	GL	SO	C	C	C	N	PI-T		
SV-57-147A	2	M-57 (SHT 2)	A-6	B	P	0.50	GL	SO	C	C	C	N	PI-T		
SV-57-147B	2	M-57 (SHT 1)	A-5	B	P	0.50	GL	SO	C	C	C	N	PI-T		
SV-57-150	2	M-57 (SHT 1)	D-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-62
SV-57-159	2	M-57 (SHT 1)	A-5	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-62

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-57-181	2	M-57 (SHT 1)	C-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-221A
SV-57-183	2	M-57 (SHT 2)	C-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-221B
SV-57-184	2	M-57 (SHT 2)	B-7	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-221A
SV-57-185	2	M-57 (SHT 2)	B-7	A	A	0.50	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-202
SV-57-186	2	M-57 (SHT 2)	B-7	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-221B
SV-57-190	2	M-57 (SHT 2)	B-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-220A
SV-57-191	2	M-57 (SHT 2)	C-6	A	A	2.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-220A
SV-57-195	2	M-57 (SHT 2)	B-6	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
59-1001	2	M-59 (SHT 1)	B-5	A/C	A	1.00	CK	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B	59-ROJ-1	PENT. X-218
59-1005A	2	M-59 (SHT 1)	E-5	A/C	A	1.00	CK	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B	59-ROJ-1	PENT. X-40H-1
59-1005B	2	M-59 (SHT 1)	F-5	A/C	A	1.00	CK	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B	59-ROJ-1	PENT. X-3B
59-1023E	3	M-59 (SHT 1)	H-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.
59-1023H	3	M-59 (SHT 1)	G-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.
59-1023K	3	M-59 (SHT 1)	H-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
59-1023M	3	M-59 (SHT 1)	G-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.
59-1023S	3	M-59 (SHT 1)	G-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.
59-1024E	3	M-59 (SHT 1)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	
59-1024H	3	M-59 (SHT 1)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	
59-1024K	3	M-59 (SHT 1)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	
59-1024M	3	M-59 (SHT 1)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	
59-1024S	3	M-59 (SHT 1)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
59-1056	2	M-59 (SHT 1)	D-5	A/C	A	1.00	CK	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B	59-ROJ-1	PENT. X-35B
59-1112	2	M-59 (SHT 1)	H-4	A/C	A	1.00	CK	SA	OC	OC	-	Y	ET-R(O&C), LJ-B	59-ROJ-1	PENT. X-3D-2
59-1128	2	M-59 (SHT 1)	G-4	A/C	A	1.00	CK	SA	OC	OC	-	Y	ET-R(O&C), LJ-B	59-ROJ-1	PENT. X-27A
59-1131E	3	M-59 (SHT 1)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	
59-1131H	3	M-59 (SHT 1)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	
59-1131K	3	M-59 (SHT 1)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	
59-1131M	3	M-59 (SHT 1	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	
59-1131S	3	M-59 (SHT 1)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-59-101	2	M-59 (SHT 1)	C-5	A	A	1.50	GL	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	59-VCS-2	PENT. X-40F-2
HV-59-102	2	M-59 (SHT 1)	C-5	A	A	1.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	59-VCS-1	PENT. X-40F-2
HV-59-129A	2	M-59 (SHT 1)	E-5	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-40H-1
HV-59-129B	2	M-59 (SHT 1)	F-5	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-3B
HV-59-131	2	M-59 (SHT 1)	D-5	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35B
HV-59-135	2	M-59 (SHT 1)	B-5	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-218
HV-59-140	SR	M-59 (SHT 2)	G-5	B	A	1.00	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-59-141	SR	M-59 (SHT 2)	G-4	B	A	1.00	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-59-142	SR	M-59 (SHT 2)	H-5	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-59-143	SR	M-59 (SHT 2)	H-6	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-59-151A	2	M-59 (SHT 1)	G-5	A	A	1.00	GL	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-27A
HV-59-151B	2	M-59 (SHT 1)	H-5	A	A	1.00	GL	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-3D-2
PSV-59-152A	3	M-59 (SHT 1)	F-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-59-152B	3	M-59 (SHT 1)	H-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-59-153A	3	M-59 (SHT 1)	F-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-59-153B	3	M-59 (SHT 1)	H-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-59-150A	3	M-59 (SHT 1)	G-6	B	A	1.00	GL	SO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
SV-59-150B	3	M-59 (SHT 1)	H-6	B	A	1.00	GL	SO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
SV-59-152A	3	M-59 (SHT 1)	F-6	B	A	1.00	GL	SO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
SV-59-152B	3	M-59 (SHT 1)	H-6	B	A	1.00	GL	SO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
XV-59-140A	2	M-59 (SHT 1)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35C
XV-59-140B	2	M-59 (SHT 1)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35D
XV-59-140C	2	M-59 (SHT 1)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35E
XV-59-140D	2	M-59 (SHT 1)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35F
XV-59-140E	2	M-59 (SHT 1)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35G

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
XV-59-141A	2	M-59 (SHT 1)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35C
XV-59-141B	2	M-59 (SHT 1)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35D
XV-59-141C	2	M-59 (SHT 1)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35E
XV-59-141D	2	M-59 (SHT 1)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35F
XV-59-141E	2	M-59 (SHT 1)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35G

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 60 PRIMARY CONTAINMENT LEAK TESTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
60-1057	2	M-60 (SHT 1)	F-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-40G-1
60-1058	2	M-60 (SHT 1)	F-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-40G-1
60-1070	2	M-60 (SHT 1)	D-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-40G-2
60-1071	2	M-60 (SHT 1)	D-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-40G-2
60-1073	2	M-60 (SHT 1)	C-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-227
60-1074	2	M-60 (SHT 1)	C-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-227

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 61 LIQUID RADWASTE COLLECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-61-110	2	M-61 (SHT 1)	F-5	A	A	4.00	GT	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-231A
HV-61-111	2	M-61 (SHT 1)	F-4	A	A	4.00	GT	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-231A
HV-61-112	2	M-61 (SHT 1)	G-4	B	A	1.50	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-230B
HV-61-130	2	M-61 (SHT 1)	B-5	A	A	4.00	GT	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-231B
HV-61-131	2	M-61 (SHT 1)	B-4	A	A	4.00	GT	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-231B
HV-61-132	2	M-61 (SHT 1)	C-4	B	A	1.50	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-230B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 87 DRYWELL CHILLED WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-87-120A	2	M-87 (SHT 4)	C-4	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-53, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-120B	2	M-87 (SHT 4)	B-4	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-55, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-121A	2	M-87 (SHT 4)	C-4	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-54, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-121B	2	M-87 (SHT 4)	A-4	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-56, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-122	2	M-87 (SHT 4)	B-5	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-55
HV-87-123	2	M-87 (SHT 4)	A-5	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-56
HV-87-124A	2	M-87 (SHT 4)	B-4	A	P	8.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-54, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 87 DRYWELL CHILLED WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-87-124B	2	M-87 (SHT 4)	A-4	A	P	8.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-56, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-125A	2	M-87 (SHT 4)	C-4	A	P	8.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-53, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-125B	2	M-87 (SHT 4)	B-4	A	P	8.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-55, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-128	2	M-87 (SHT 4)	C-5	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-53
HV-87-129	2	M-87 (SHT 4)	C-5	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-54

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 90 CONTROL STRUCTURE CHILLED WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
90-0013A	3	M-90 (SHT 1)	F-3	C	A	6.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
90-0013B	3	M-90 (SHT 1)	F-2	C	A	6.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
PSV-90-048A	3	M-90 (SHT 1)	B-8	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-90-048B	3	M-90 (SHT 1)	B-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-90-049A	3	M-90 (SHT 1)	B-8	C	A	0.50	RL	SA	C	OC	-	N	RT-P3		
PSV-90-049B	3	M-90 (SHT 1)	B-5	C	A	0.50	RL	SA	C	OC	-	N	RT-P3		
SV-90-045A	3	M-90 (SHT 2)	G-3	B	A	1.50	GL	SO	OC	OC	C	N	ET-Q, ST-Q(O&C), FS-Q(C)		
SV-90-045B	3	M-90 (SHT 2)	G-2	B	A	1.50	GL	SO	OC	OC	C	N	ET-Q, ST-Q(O&C), FS-Q(C)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 1 AND COMMON

SYSTEM: 90 CONTROL STRUCTURE CHILLED WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-90-047A	3	M-90 (SHT 2)	E-3	B	A	1.00	GL	SO	OC	OC	C	N	ET-Q, ST-Q(O&C), FS-Q(C)		
SV-90-047B	3	M-90 (SHT 2)	E-2	B	A	1.00	GL	SO	OC	OC	C	N	ET-Q, ST-Q(O&C), FS-Q(C)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 01 MAIN STEAM

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-01-208	2	M-01 (SHT 3)	H-7	B	A	6.00	GT	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	01-VCS-3	
HV-01-209	2	M-01 (SHT 3)	C-8	B	A	6.00	GT	MO	C	C	AI	N	ET-C, ST-C(C), PI-T	01-VCS-3	
HV-01-211	2	M-01 (SHT 3)	D-7	B	A	8.00	GT	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	01-VCS-2	
HV-01-250	2	M-01 (SHT 3)	D-8	B	A	4.00	GT	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	01-VCS-1	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
11-2007	3	M-11 (SHT 4)	E-7	C	A	6.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** U/2 ESW Grp3
11-2009	3	M-11 (SHT 5)	C-4	C	A	6.00	CK	SA	C	O	-	N	ET-Q(O), DI-P6		**Condition Monitoring** U/2 ESW Grp3
11-2011	3	M-11 (SHT 4)	E-7	A/C	A	8.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		
11-2012	3	M-11 (SHT 5)	C-3	A/C	A	8.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		
HV-11-201A	3	M-11 (SHT 4)	F-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-201B	3	M-11 (SHT 5)	F-6	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-201C	3	M-11 (SHT 4)	G-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-201D	3	M-11 (SHT 5)	G-6	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-201E	3	M-11 (SHT 4)	G-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-201F	3	M-11 (SHT 5)	G-6	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-201G	3	M-11 (SHT 4)	H-5	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-201H	3	M-11 (SHT 5)	H-6	B	A	2.00	GL	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-204A	3	M-11 (SHT 4)	E-5	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-204B	3	M-11 (SHT 5)	C-5	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-204C	3	M-11 (SHT 4)	E-3	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-204D	3	M-11 (SHT 5)	C-7	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-204E	3	M-11 (SHT 4)	D-5	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-204F	3	M-11 (SHT 5)	C-5	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-204G	3	M-11 (SHT 4)	D-3	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-204H	3	M-11 (SHT 5)	C-7	B	A	4.00	GT	AO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O)		
HV-11-207	3	M-11 (SHT 1)	G-1	B	P	4.00	GT	MO	C	C	AI	N	PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-221	3	M-11 (SHT 4)	C-7	B	A	8.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-223	3	M-11 (SHT 4)	C-7	B	A	8.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-225	3	M-11 (SHT 5)	C-3	B	A	8.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-226	3	M-11 (SHT 5)	C-3	B	A	8.00	GT	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-11-227	3	M-11 (SHT 4)	B-6	B	P	10.00	GT	AO	C	C	C	N	PI-T		
HV-11-228	3	M-11 (SHT 4)	B-5	B	P	10.00	GT	AO	C	C	C	N	PI-T		
HV-11-2231B	3	M-11 (SHT 1)	D-3	B	P	6.00	SK	MO	C	C	AI	N			Alt Supply Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-231D	3	M-11 (SHT 1)	D-2	B	P	6.00	SK	MO	C	C	AI	N			Alt Supply Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-232A	3	M-11 (SHT 1)	D-4	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
HV-11-232B	3	M-11 (SHT 1)	D-3	B	P	6.00	GT	MO	C	C	AI	N			Alt Return Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-232C	3	M-11 (SHT 1)	D-4	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
HV-11-232D	3	M-11 (SHT 1)	D-3	B	P	6.00	GT	MO	C	C	AI	N			Alt Return Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-233A	3	M-11 (SHT 1)	D-4	B	P	6.00	SK	MO	C	C	AI	N			Alt Supply Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.

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INSERVICE TESTING VALVE TABLE

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-11-233C	3	M-11 (SHT 1)	D-4	B	P	6.00	SK	MO	C	C	AI	N			Alt Supply Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-234A	3	M-11 (SHT 1)	D-4	B	P	6.00	GT	MO	C	C	AI	N			Alt Return Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-234B	3	M-11 (SHT 1)	D-3	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
HV-11-234C	3	M-11 (SHT 1)	D-4	B	P	6.00	GT	MO	C	C	AI	N			Alt Return Valve Disabled If placed in service, ET & PIV required, see ECR 01-00816 and A1328163-03.
HV-11-234D	3	M-11 (SHT 1)	D-3	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
PSV-11-207A	3	M-11 (SHT 1)	C-4	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-11-207B	3	M-11 (SHT 1)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-11-207C	3	M-11 (SHT 1)	C-4	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		

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INSERVICE TESTING VALVE TABLE

SYSTEM: 11 EMERGENCY SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-11-207D	3	M-11 (SHT 1)	C-2	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 12 RHR SERVICE WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-12-210	3	M-12 (SHT 1)	E-1	B	P	4.00	GT	MO	C	C	AI	N	PI-T		
HV-12-211	3	M-12 (SHT 1)	A-3	B	A	30.00	BF	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-12-212	3	M-12 (SHT 1)	D-2	B	A	36.00	BF	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-12-213	3	M-12 (SHT 1)	A-3	B	A	30.00	BF	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-12-214	3	M-12 (SHT 1)	D-2	B	A	36.00	BF	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 13 REACTOR ENCLOSURE COOLING WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-13-206	2	M-13 (SHT 2)	G-5	A	A	4.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	13-VCS-1	PENT. X-23
HV-13-207	2	M-13 (SHT 2)	H-7	A	A	4.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	13-VCS-1	PENT. X-24
HV-13-208	2	M-13 (SHT 2)	G-5	A	A	3.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	13-VCS-1	PENT. X-23
HV-13-209	2	M-13 (SHT 2)	G-5	A	P	3.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-23, ELECTRICALLY DISCONNECTED
HV-13-210	2	M-13 (SHT 2)	G-8	A	P	3.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-24, ELECTRICALLY DISCONNECTED
HV-13-211	2	M-13 (SHT 2)	G-7	A	A	3.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	13-VCS-1	PENT. X-24
PSV-13-202	2	M-13 (SHT 2)	H-7	A	A	1.00	RL	SA	C	O	-	N	RP-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 15 COMPRESSED AIR

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
15-2139	2	M-15 (SHT 29)	H-5	A	P	3.00	GT	MA	LC	C	AI	Y	LJ-B		PENT. X-21
15-2140	2	M-15 (SHT 29)	H-5	A	P	3.00	GT	MA	LC	C	AI	Y	LJ-B		PENT. X-21
15-2412A	SR	M-15 (SHT 29)	A-6	A/C	A	0.75	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO. 1
15-2412B	SR	M-15 (SHT 30)	G-2	A/C	A	0.75	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO. 2
15-2412C	SR	M-15 (SHT 30)	E-2	A/C	A	0.75	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		INFLATABLE SEAL NO. 3
15-2412D	SR	M-15 (SHT 30)	B-2	A/C	A	0.75	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C), LP-T		INFLATABLE SEAL NO. 4
15-2412G	SR	M-15 (SHT 29)	C-6	A/C	A	0.75	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO. 7
15-2412K	SR	M-15 (SHT 30)	C-4	A/C	A	0.75	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO. 10

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 15 COMPRESSED AIR

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
15-2413A	SR	M-15 (SHT 29)	A-6	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 1
15-2413B	SR	M-15 (SHT 30)	G-1	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 2
15-2413C	SR	M-15 (SHT 30)	E-1	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 3
15-2413D	SR	M-15 (SHT 30)	B-1	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 4
15-2413G	SR	M-15 (SHT 29)	D-6	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 7
15-2413K	SR	M-15 (SHT 30)	C-4	A	P	0.75	TW	MA	O	O	AI	N	LP-T		INFLATABLE SEAL NO. 10
15-2886A	SR	M-15 (SHT 29)	B-7	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO.1
15-2886B	SR	M-15 (SHT 30)	G-1	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO.2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 15 COMPRESSED AIR

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
15-2886C	SR	M-15 (SHT 30)	E-1	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-Q(C), LP-T		INFLATABLE SEAL NO.3
15-2886D	SR	M-15 (SHT 30)	C-1	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-Q(C), LP-T		INFLATABLE SEAL NO.4
15-2886G	SR	M-15 (SHT 29)	D-6	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO.7
15-2886K	SR	M-15 (SHT 30)	C-4	A/C	A	0.50	CK	SA	C	C	-	N	BD-R(O), ET-R(C), LP-T	15-ROJ-1	INFLATABLE SEAL NO.10
PSV-15-249A	SR	M-15 (SHT 29)	B-6	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 1
PSV-15-249B	SR	M-15 (SHT 30)	G-2	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 2
PSV-15-249C	SR	M-15 (SHT 30)	F-2	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 3
PSV-15-249D	SR	M-15 (SHT 30)	C-2	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 4

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 15 COMPRESSED AIR

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-15-249G	SR	M-15 (SHT 29)	D-6	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 7
PSV-15-249K	SR	M-15 (SHT 30)	C-4	A/C	A	0.50	RL	SA	C	OC	-	N	RT-P3, LP-T		INFLATABLE SEAL NO. 10

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
20-2046A	3	M-20 (SHT 9)	D-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2046B	3	M-20 (SHT 9)	D-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2046C	3	M-20 (SHT 9)	D-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2046D	3	M-20 (SHT 9)	D-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2054A	3	M-20 (SHT 9)	F-6		A	0.75	CK	SA	OC	C	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2054B	3	M-20 (SHT 9)	F-6		A	0.75	CK	SA	OC	C	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2054C	3	M-20 (SHT 9)	F-6		A	0.75	CK	SA	OC	C	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2054D	3	M-20 (SHT 9)	F-6		A	0.75	CK	SA	OC	C	-	N			SKID MOUNTED TP-EXE-IST-00-04

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
20-2055A	3	M-20 (SHT 9)	G-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2055B	3	M-20 (SHT 9)	G-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2055C	3	M-20 (SHT 9)	G-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2055D	3	M-20 (SHT 9)	G-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2118A	3	M-20 (SHT 12)	B-5	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-2118B	3	M-20 (SHT 12)	B-5	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-2118C	3	M-20 (SHT 12)	B-5	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-2118D	3	M-20 (SHT 12)	B-5	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-2122A	3	M-20 (SHT 12)	B-4	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
20-2122B	3	M-20 (SHT 12)	B-4	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-2122C	3	M-20 (SHT 12)	B-4	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-2122D	3	M-20 (SHT 12)	B-4	C	A	1.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
20-2162A	3	M-20 (SHT 9)	H-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2162B	3	M-20 (SHT 9)	H-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2162C	3	M-20 (SHT 9)	H-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
20-2162D	3	M-20 (SHT 9)	H-6		A	0.75	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
92-2302A	3	M-20 (SHT 12)	F-5		A	1.5	DI	AO	C	O	O	N	,		A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
92-2302B	3	M-20 (SHT 12)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-2302C	3	M-20 (SHT 12)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-2302D	3	M-20 (SHT 12)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-2303A	3	M-20 (SHT 12)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04 SKID MOUNTED
92-2303B	3	M-20 (SHT 12)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04, SKID MOUNTED
92-2303C	3	M-20 (SHT 12)	F-5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04, SKID MOUNTED
92-2303D	3	M-20 (SHT 12)	F -5		A	1.5	DI	AO	C	O	O	N			A1498736-08 TP-EXE-IST-00-04, SKID MOUNTED

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 20 FUEL & DIESEL OIL STORAGE TRANSFER & AIR STARTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-020-228A-1	3	M-20 (SHT 12)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-228A-2	3	M-20 (SHT 12)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-228B-1	3	M-20 (SHT 12)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-228B-2	3	M-20 (SHT 12)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-228C-1	3	M-20 (SHT 12)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-228C-2	3	M-20 (SHT 12)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-228D-1	3	M-20 (SHT 12)	C-5	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-020-228D-2	3	M-20 (SHT 12)	C-3	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 26 PLANT PROCESS RADIATION MONITORING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-26-290A	2	M-26 (SHT 8)	G-3	A	A	1.00	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-117B-1
SV-26-290B	2	M-26 (SHT 8)	F-3	A	A	1.00	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-117B-1
SV-26-290C	2	M-26 (SHT 8)	G-4	A	A	1.00	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-117B-2
SV-26-290D	2	M-26 (SHT 8)	F-4	A	A	1.00	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-117B-2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
41-2016	1	M-41 (SHT 4)	F-4	A	P	4.00	GL	MA	LC	C	AI	Y	LJ-B		PENT. X-44
41-2017	1	M-41 (SHT 4)	F-4	A	P	4.00	GL	MA	LC	C	AI	Y	LJ-B		PENT. X-44
41-2036A	1	M-41 (SHT 4)	D-5	A/C	A	1.00	CK	SA	C	OC	-	Y	ET-C(O&C), LJ-B	41-VCS-4	PENT. X-9A
41-2036B	1	M-41 (SHT 4)	B-4	A/C	A	1.00	CK	SA	C	OC	-	Y	ET-C(O&C), LJ-B	41-VCS-4	PENT. X-9B
41-2F010A	1	M-41 (SHT 4)	D-4	A/C	A	24.00	CK	SA	O	OC	-	Y	ET-Q(O), ET-R(C), LJ-B	41-ROJ-1	PENT. X-9A
41-2F010B	1	M-41 (SHT 4)	C-4	A/C	A	24.00	CK	SA	O	OC	-	Y	ET-Q(O), ET-R(C), LJ-B	41-ROJ-1	PENT. X-9B
41-2F024A	3	M-41 (SHT 5)	G-4	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-3	
41-2F024B	3	M-41 (SHT 5)	G-4	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-3	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
41-2F024C	3	M-41 (SHT 5)	G-4	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-3	
41-2F024D	3	M-41 (SHT 5)	G-4	C	A	1.50	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	41-ROJ-3	
41-2F029A	3	M-41 (SHT 5)	H-4	C	A	1.50	CK	SA	OC	C	-	N	BD-C(O), ET-C(C)	41-VCS-5	
41-2F029B	3	M-41 (SHT 5)	H-4	C	A	1.50	CK	SA	OC	C	-	N	BD-C(O), ET-C(C)	41-VCS-5	
41-2F029C	3	M-41 (SHT 5)	H-4	C	A	1.50	CK	SA	OC	C	-	N	BD-C(O), ET-C(C)	41-VCS-5	
41-2F029D	3	M-41 (SHT 5)	H-4 BD_R(O),	C	A	1.50	CK	SA	OC	C	-	N	BD-C(O), ET-C(C)	41-VCS-5	
41-2F036E	3	M-41 (SHT 5)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	
41-2F036H	3	M-41 (SHT 5)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
41-2F036K	3	M-41 (SHT 5)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	
41-2F036M	3	M-41 (SHT 5)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	
41-2F036S	3	M-41 (SHT 5)	G-8	C	A	1.50	CK	SA	OC	OC	-	N	ET-R(O&C)	41-ROJ-2	
HV-41-209A	2	M-41 (SHT 4)	D-7	A	P	16.00	GT	MO	LC	C	AI	Y	LJ-B, PI-T		PENT. X-9A
HV-41-209B	2	M-41 (SHT 4)	D-7	A	P	16.00	GT	MO	LC	C	AI	Y	LJ-B, PI-T		PENT. X-9B
HV-41-230A	1	M-41 (SHT 4)	B-5	A	A	1.50	GL	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	41-VCS-3	PENT. X-9B
HV-41-230B	1	M-41 (SHT 4)	C-5	A	A	1.50	GL	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	41-VCS-3	PENT. X-9A
HV-41-233A	1	M-41 (SHT 4)	B-5	A	A	1.50	GL	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	41-VCS-3	PENT. X-9A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-41-233B	1	M-41 (SHT 4)	B-5	A	A	1.50	GL	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	41-VCS-3	PENT. X-9B
HV-41-240	SR	M-41 (SHT 5)	D-3	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-41-241	SR	M-41 (SHT 5)	D-2	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-41-242	SR	M-41 (SHT 5)	D-2	B	A	3.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-41-243	SR	M-41 (SHT 5)	D-2	B	A	3.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-41-2F001	1	M-41 (SHT 4)	H-3	B	P	2.00	GL	MO	C	C	AI	N	PI-T		
HV-41-2F002	1	M-41 (SHT 4)	H-3	B	P	2.00	GL	MO	C	C	AI	N	PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-41-2F016	1	M-41 (SHT 5)	D-5	A	A	3.00	GT	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-8
HV-41-2F019	1	M-41 (SHT 5)	D-5	A	A	3.00	GT	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-8
HV-41-2F021	SR	M-41 (SHT 5)	D-1	B	A	3.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-41-2F022A	1	M-41 (SHT 5)	F-5	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7A
HV-41-2F022B	1	M-41 (SHT 5)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7B
HV-41-2F022C	1	M-41 (SHT 5)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7C
HV-41-2F022D	1	M-41 (SHT 5)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7D

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-41-2F028A	1	M-41 (SHT 5)	F-5	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7A
HV-41-2F028B	1	M-41 (SHT 5)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7B
HV-41-2F028C	1	M-41 (SHT 5)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7C
HV-41-2F028D	1	M-41 (SHT 5)	C-6	A	A	26.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	41-VCS-2	PENT. X-7D
HV-41-2F032A	2	M-41 (SHT 4)	D-7	A/C	A	24.00	SK	SA	O	C	-	Y	BD-Q(O), ET-R(C), LJ-B, PI-T	41-ROJ-1	PENT. X-9A
HV-41-2F032B	2	M-41 (SHT 4)	C-8	A/C	A	24.00	SK	SA	O	C	-	Y	BD-Q(O), ET-R(C), LJ-B, PI-T	41-ROJ-1	PENT. X-9B
HV-41-2F074A	1	M-41 (SHT 4)	D-4	A/C	A	24.00	TC	SA	O	OC	-	Y	ET-Q(O), ET-C(C), LJ-B, PI-T	41-VCS-1	PENT. X-9A
HV-41-2F074B	1	M-41 (SHT 4)	C-4	A/C	A	24.00	TC	SA	O	OC	-	Y	ET-Q(O), ET-C(C), LJ-B, PI-T	41-VCS-1	PENT. X-9B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-41-2F084	1	M-41 (SHT 5)	B-5	A	A	1.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-43B
HV-41-2F085	1	M-41 (SHT 5)	B-4	A	A	1.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-43B
HV-C-41-2F020	2	M-41 (SHT 5)	D-3	B	A	2.00	GL	MO	O	O	AI	N	ET-Q, ST-Q(O), PI-T		
PSV-41-212	1	M-41 (SHT 4)	E-5	A/C	A	0.75	RL	SA	C	OC	-	Y	RT-P2, LJ-B		PENT. X-44
PSV-41-234A	2	M-41 (SHT 4)	B-6	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-41-234B	2	M-41 (SHT 4)	C-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-41-2F013A	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-2F013B	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-2F013C	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-2F013D	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-2F013E	1	M-41 (SHT 5)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		
PSV-41-2F013F	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-2F013G	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-2F013H	1	M-41 (SHT 5)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		
PSV-41-2F013J	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-2F013K	1	M-41 (SHT 5)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-2F013L	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-2F013M	1	M-41 (SHT 5)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		
PSV-41-2F013N	1	M-41 (SHT 5)	F-7	C	A	6.00	RL	SA	C	OC	-	N	RT-P1		
PSV-41-2F013S	1	M-41 (SHT 5)	G-7	C	A	6.00	RL	SA, AO	C	OC	-	N	RT-P1		
PSV-41-2F037A	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037B	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037C	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037D	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-2F037E	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037F	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037G	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037H	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037J	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037K	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037L	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037M	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-2F037N	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F037S	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097A	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097B	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097C	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097D	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097E	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097F	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-41-2F097G	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097H	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097J	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097K	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097L	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097M	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097N	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		
PSV-41-2F097S	3	M-41 (SHT 5)	B-6	C	A	6.00	VR	SA	C	OC	-	N	RT-P3		

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 41 NUCLEAR BOILER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
42-2044A	2	M-42 (SHT 6)	C-6	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-67B
42-2044B	2	M-42 (SHT 6)	E-6	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-65A
42-2044C	2	M-42 (SHT 6)	F-6	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-65B
42-2044D	2	M-42 (SHT 6)	G-6	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-67A
42-2046A	2	M-42 (SHT 6)	C-5	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-67B
42-2046B	2	M-42 (SHT 6)	E-5	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-65A
42-2046C	2	M-42 (SHT 6)	F-5	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-65B
42-2046D	2	M-42 (SHT 6)	G-5	A/C	A	0.50	CK	SA	O	C	-	N	BD-R(O), ET-R(C), LP-T	42-ROJ-1	PENT. X-67A

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 42 NUCLEAR BOILER VESSEL INSTRUMENTATION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-42-247A	1	M-42 (SHT 3)	B-6	B	A	1.50	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	42-VCS-1	PENT. X-30B-1
HV-42-247B	1	M-42 (SHT 3)	B-3	B	A	1.50	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	42-VCS-1	PENT. X-50A
HV-42-247C	1	M-42 (SHT 3)	A-6	B	A	1.50	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	42-VCS-1	PENT. X-22
HV-42-247D	1	M-42 (SHT 3)	A-3	B	A	1.50	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	42-VCS-1	PENT. X-40E

IST Program Plan
Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: **43** REACTOR RECIRCULATION PUMP

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
43-2004A	1	M-43 (SHT 3)	C-7	A/C	A	1.00	CK	SA	O	C	-	Y	BD-Q(O), ET-R(C), LJ-B	43-ROJ-1	PENT. X-61-1
43-2004B	1	M-43 (SHT 3)	B-7	A/C	A	1.00	CK	SA	O	C	-	Y	BD-Q(O), ET-R(C), LJ-B	43-ROJ-1	PENT. X-61-2
HV-43-2F019	1	M-43 (SHT 3)	G-4	A	A	1.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-28A-1
HV-43-2F020	1	M-43 (SHT 3)	G-2	A	A	1.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-28A-1

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 44 REACTOR WATER CLEANUP

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-44-2F001	1	M-44 (SHT 3)	E-7	A	A	6.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	44-VCS-1	PENT X-14
HV-44-2F004	1	M-44 (SHT 3)	E-6	A	A	6.00	GT	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	44-VCS-1	PENT X-14
HV-44-2F039	2	M-44 (SHT 4)	H-7	A/C	A	4.00	TC	SA	O	C	-	Y	BD-Q(O), ET-C(C), LJ-B	44-VCS-2	PENT X-9A, X-9B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 46 CONTROL ROD DRIVE HYDRAULIC - PART A

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
46-2101	2	M-46 (SHT 2)	E-2	A/C	A	2.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-37A
46-2102	2	M-46 (SHT 2)	E-2	A/C	A	2.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-37B
46-2108	2	M-46 (SHT 2)	F-6	A/C	A	2.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-37C
46-2109	2	M-46 (SHT 2)	F-5	A/C	A	2.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-37D
46-2115	2	M-46 (SHT 2)	F-2	A/C	A	1.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-38A
46-2116	2	M-46 (SHT 2)	F-3	A/C	A	1.00	CK	SA	O	C	-	Y	BD-C(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-38B
46-2122	2	M-46 (SHT 2)	G-6	A/C	A	1.00	CK	SA	O	C	-	Y	BD-Q(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-38C
46-2123	2	M-46 (SHT 2)	G-6	A/C	A	1.00	CK	SA	O	C	-	Y	BD-Q(O), ET-C(C), LJ-B	46-VCS-1	PENT. X-38D

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 46 CONTROL ROD DRIVE HYDRAULIC - PART A

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-46-225	SR	M-46 (SHT 2)	C-3	B	A	1.00	GL	MO	C	O	AI	N	ET-R, ST-R(O), PI-T	46-ROJ-1	
HV-46-226	SR	M-46 (SHT 2)	C-3	B	A	1.00	GL	MO	C	O	AI	N	ET-R, ST-R(O), PI-T	46-ROJ-1	
HV-46-227	SR	M-46 (SHT 2)	C-4	B	A	1.00	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	46-VCS-2	
HV-46-228	SR	M-46 (SHT 2)	C-4	B	A	1.00	GL	MO	O	C	AI	N	ET-C, ST-C(C), PI-T	46-VCS-2	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 47 CONTROL ROD DRIVE HYDRAULIC - PART B

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
47-2-14(x-y)	2	M-47 (SHT 2)	D-6	C	A	0.75	CK	SA	C	O	-	N	BD-R(C), ET-R(O)	47-VRR-2	Typ. of 185 GL 89-04, Pos.7
47-2-15(x-y)	2	M-47 (SHT 2)	B-4	A/C	A	0.50	CK	SA	OC	C	-	N	BD-C(O), ET-C(C), LP-T	47-VCS-1	Typ. of 185
47-2-38(x-y)	2	M-47 (SHT 2)	B-6	C	A	0.50	CK	SA	O	C	-	N	BD-Q(O), ET-Q(C)		Typ. of 185
XV-47-2-26(x-y)	2	M-47 (SHT 2)	B-5	B	A	0.50	GL	AO	C	O	O	N	ET-R, FS-R(O), ST-R(O), PI-T	47-VRR-2	Typ. of 185 GL 89-04, Pos.7
XV-47-2-27(x-y)	2	M-47 (SHT 2)	D-6	B	A	0.75	GL	AO	C	O	O	N	ET-R, FS-R(O), ST-R(O), PI-T	47-VRR-2	Typ. of 185 GL 89-04, Pos.7
XV-47-2F010	2	M-47 (SHT 2)	H-4	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-38
XV-47-2F011	2	M-47 (SHT 2)	D-6	A	A	2.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-38

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 47 CONTROL ROD DRIVE HYDRAULIC - PART B

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
XV-47-2F180	2	M-47 (SHT 2)	H-4	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-38
XV-47-2F181	2	M-47 (SHT 2)	D-6	A	A	2.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-38

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 48 STANDBY LIQUID CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
48-2027	1	M-48 (SHT 2)	G-8	C	A	2.00	CK	SA	C	O	-	N	BD-R(C), ET-R(O)	48-ROJ-1	
48-2F007	1	M-48 (SHT 2)	F-8	A/C	A	2.00	CK	SA	C	OC	-	Y	ET-R(O&C), LJ-B	48-ROJ-1	PENT. X-42, 116
48-2F033A	2	M-48 (SHT 2)	E-6	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C)		
48-2F033B	2	M-48 (SHT 2)	C-6	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C)		
48-2F033C	2	M-48 (SHT 2)	B-6	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C)		
48-2F036	1	M-48 (SHT 2)	F-8	B	P	2.00	GL	MA	LO	O	AI	N	PI-T		
HV-48-2F006A	1	M-48 (SHT 2)	E-8	A/C	A	2.00	SK	MO	C	OC	AI	Y	ET-R(O), ET-QC), ST-Q(O&C), LJ-B, PI-T	48-ROJ-1	PENT. X-42. MOTOR OPERATOR NORMALLY OPEN

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 48 STANDBY LIQUID CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-48-2F006B	1	M-48 (SHT 2)	D-8	A/C	A	2.00	SK	MO	C	OC	AI	Y	ET-R(O), ET-Q(C), ST-Q(O&C), LJ-B, PI-T	48-ROJ-1	PENT. X-116. MOTOR OPERATOR NORMALLY OPEN
PSV-48-2F029A	2	M-48 (SHT 2)	E-6	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-48-2F029B	2	M-48 (SHT 2)	D-6	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
PSV-48-2F029C	2	M-48 (SHT 2)	B-6	C	A	0.75	RL	SA	C	OC	-	N	RT-P3		
XV-48-2F004A	2	M-48 (SHT 2)	E-7	D	A	1.50	EX	EX	C	O	AI	N	XT-P4		
XV-48-2F004B	2	M-48 (SHT 2)	C-7	D	A	1.50	EX	EX	C	O	AI	N	XT-P4		
XV-48-2F004C	2	M-48 (SHT 2)	B-7	D	A	1.50	EX	EX	C	O	AI	N	XT-P4		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
49-2017	2	M-49 (SHT 2)	A-8	C	A	3.00	CK	SA	OC	OC	-	N	ET-Q(O&C,)		**Condition Monitoring** U/2 RCIC Grp3
49-2018	2	M-49 (SHT 2)	A-8	C	A	3.00	CK	SA	OC	OC	-	N	ET-Q(O&C,)		**Condition Monitoring** U/2 RCIC Grp3
49-2032	2	M-49 (SHT 2)	C-3	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C,)		
49-2033	2	M-49 (SHT 2)	C-3	C	A	1.50	CK	SA	C	OC	-	N	ET-Q(O&C,)		
49-2F001	2	M-49 (SHT 2)	B-4	C	A	8.00	SK	SA	OC	O	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/2 RCIC Grp2
49-2F011	2	M-49 (SHT 2)	E-2	C	A	6.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/2 RCIC Grp1
49-2F014	2	M-49 (SHT 2)	D-3	C	A	6.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
49-2F028	2	M-49 (SHT 2)	B-2	A/C	A	1.00	CK	SA	C	C	-	Y	BD-Q(O), ET-C(C), LJ-B	49-VCS-3	PENT. X-217

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
49-2F030	2	M-49 (SHT 2)	A-6	C	A	6.00	CK	SA	C	O	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/2 RCIC Grp1
49-2F064	2	M-49 (SHT 2)	B-4	C	A	2.00	CK	SA	OC	C	-	N	BD-C(O), ET-C(C)	49-VCS-4	
49-2F065	2	M-49 (SHT 2)	B-4	C	A	2.00	CK	SA	OC	C	-	N	BD-C(O), ET-C(C)	49-VCS-4	
49-2F068	2	M-49 (SHT 2)	A-8	C	A	3.00	CK	SA	OC	OC	-	N	ET-Q(O&C,)		**Condition Monitoring** U/2 RCIC Grp3
49-2F081	2	M-49 (SHT 2)	A-8	C	A	3.00	CK	SA	OC	OC	-	N	ET-Q(O&C,)		**Condition Monitoring** U/2 RCIC Grp3
HV-49-2F002	2	M-49 (SHT 2)	B-5	A/C	A	2.00	SK	MO	OC	C	AI	Y	BD-Q(O), ET-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-217
HV-49-2F007	1	M-49 (SHT 2)	F-6	A	A	3.00	GL	MO	O	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	49-VCS-1	PENT. X-10
HV-49-2F008	1	M-49 (SHT 2)	F-5	A	A	3.00	GL	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-10

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-49-2F010	2	M-49 (SHT 2)	E-2	B	A	6.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-49-2F012	2	M-49 (SHT 2)	D-4	B	P	6.00	GT	MO	O	O	AI	N	PI-T		
HV-49-2F013	2	M-49 (SHT 2)	D-4	A	A	6.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-9B
HV-49-2F019	2	M-49 (SHT 2)	C-5	B	A	2.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-216
HV-49-2F022	2	M-49 (SHT 2)	E-4	B	A	4.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-49-2F025	2	M-49 (SHT 2)	C-2	B	A	1.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-49-2F026	2	M-49 (SHT 2)	B-2	B	A	1.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-49-2F029	2	M-49 (SHT 2)	A-5	B	A	6.00	GT	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-49-2F031	2	M-49 (SHT 2)	A-6	B	A	6.00	GT	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-214
HV-49-2F060	2	M-49 (SHT 2)	C-5	B	A	8.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-215
HV-49-2F076	1	M-49 (SHT 2)	E-5	A	A	1.50	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-10
HV-49-2F080	2	M-49 (SHT 2)	A-7	A	A	3.00	GT	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-241
HV-49-2F084	2	M-49 (SHT 2)	C-8	A	A	3.00	GT	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-241

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 49 REACTOR CORE ISOLATION COOLING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
50-2F047	2	M-50 (SHT 2)	B-5	C	A	2.00	CK	SA	OC	C	-	N	BD-Q(O), ET-Q(C)		
FV-50-213	2	M-50 (SHT 2)	F-4		A	4.00	GL	HYD	OC	O	O	N			SKID MOUNTED TP-EXE-IST-00-04
HV-50-212	2	M-50 (SHT 2)	F-3		P	4.00	GL	MO	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
HV-50-2F045	2	M-50 (SHT 2)	F-2	B	A	6.00	GL	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-50-2F046	2	M-50 (SHT 2)	D-7	B	A	2.00	GL	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
PSE-50-2D001	2	M-50 (SHT 2)	F-5	D	A	8.00	RD	SA	C	O	-	N	RD-P2		
PSE-50-2D002	2	M-50 (SHT 2)	H-5	D	A	8.00	RD	SA	C	O	-	N	RD-P2		
PSV-50-2F018	2	M-50 (SHT 2)	C-6	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
51-2032A	2	M-51 (SHT 5)	G-5	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp1
51-2032B	2	M-51 (SHT 7)	G-4	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp1
51-2115A	2	M-51 (SHT 5)	A-7	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
51-2115B	2	M-51 (SHT 7)	A-2	C	A	1.50	CK	SA	C	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp2
51-2115C	2	M-51 (SHT 5)	A-6	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
51-2115D	2	M-51 (SHT 7)	A-3	C	A	1.50	CK	SA	C	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp2
51-2116A	2	M-51 (SHT 5)	A-7	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
51-2116C	2	M-51 (SHT 5)	A-6	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
51-2200A	1	M-51 (SHT 5)	E-3	A/C	A	0.75	CK	SA	C	C	-	Y	BD-R(O), ET-R(C), LJ-B, LP-T	51-ROJ-3	
51-2200B	1	M-51 (SHT 7)	E-7	A/C	A	0.75	CK	SA	C	C	-	Y	BD-R(O), ET-R(C), LJ-B, LP-T	51-ROJ-3	
51-2F031A	2	M-51 (SHT 5)	B-6	C	A	18.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
51-2F031B	2	M-51 (SHT 7)	C-3	C	A	18.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
51-2F031C	2	M-51 (SHT 5)	B-6	C	A	18.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
51-2F031D	2	M-51 (SHT 7)	B-4	C	A	18.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
51-2F046A	2	M-51 (SHT 5)	C-5	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 51-ROJ-2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
51-2F046B	2	M-51 (SHT 7)	C-5	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 51-ROJ-2
51-2F046C	2	M-51 (SHT 5)	C-5	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 51-ROJ-2
51-2F046D	2	M-51 (SHT 7)	C-4	C	A	4.00	CK	SA	OC	O	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 51-ROJ-2
51-2F065A	1	M-51 (SHT 5)	F-1	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
51-2F065B	1	M-51 (SHT 7)	F-8	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
51-2F065C	1	M-51 (SHT 5)	F-1	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
51-2F065D	1	M-51 (SHT 7)	G-8	B	P	12.00	GT	MA	LO	O	-	N	PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
51-2F090A	2	M-51 (SHT 5)	G-4	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp1
51-2F090B	2	M-51 (SHT 7)	G-4	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp1
51-2F090C	2	M-51 (SHT 5)	G-5	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp1
51-2F090D	2	M-51 (SHT 7)	G-4	C	A	4.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp1
HV-51-205A	2	M-51 (SHT 5)	C-3	B	A	4.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-226A
HV-51-205B	2	M-51 (SHT 7)	D-6	B	A	4.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-226B
HV-51-225A	2	M-51 (SHT 5)	D-3	B	A	18.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-204A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-225B	2	M-51 (SHT 7)	D-6	B	A	18.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-204B
HV-51-242A	1	M-51 (SHT 5)	F-2	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-45A
HV-51-242B	1	M-51 (SHT 7)	F-7	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-45B
HV-51-242C	1	M-51 (SHT 5)	F-2	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-45C
HV-51-242D	1	M-51 (SHT 7)	F-7	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-45D
HV-51-251A	1	M-51 (SHT 5)	E-3	A	P	1.50	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-13A
HV-51-251B	1	M-51 (SHT 7)	E-6	A	P	1.50	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-13B
HV-51-2F003A	2	M-51 (SHT 6)	F-5	B	P	18.00	GT	MO	O	O	AI	N	PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-2F003B	2	M-51 (SHT 8)	F-6	B	P	18.00	GT	MO	O	O	AI	N	PI-T		
HV-51-2F004A	2	M-51 (SHT 5)	C-3	B	A	24.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-203A
HV-51-2F004B	2	M-51 (SHT 7)	C-6	B	A	24.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-203B
HV-51-2F004C	2	M-51 (SHT 5)	C-2	B	A	24.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-203C
HV-51-2F004D	2	M-51 (SHT 7)	C-7	B	A	24.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-203D
HV-51-2F006A	2	M-51 (SHT 5)	B-2	B	A	20.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-2F006B	2	M-51 (SHT 7)	B-7	B	A	20.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-2F007A	2	M-51 (SHT 5)	C-5	B	A	4.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-2F007B	2	M-51 (SHT 7)	C-5	B	A	4.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-2F007C	2	M-51 (SHT 5)	C-5	B	A	4.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-2F007D	2	M-51 (SHT 7)	C-4	B	A	4.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-2F008	1	M-51 (SHT 5)	E-3	A	A	20.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, LP-T, PI-T	51-VCS-2	PENT. X-12
HV-51-2F009	1	M-51 (SHT 7)	E-8	A	A	20.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, LP-T, PI-T	51-VCS-2	PENT. X-12
HV-51-2F010A	2	M-51 (SHT 5)	D-6	B	A	18.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-2F010B	2	M-51 (SHT 7)	D-4	B	A	18.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-2F014A	3	M-51 (SHT 6)	C-7	B	A	20.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-2F014B	3	M-51 (SHT 8)	C-5	B	A	20.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-2F015A	1	M-51 (SHT 5)	E-3	A	A	12.00	GL	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-13A
HV-51-2F015B	1	M-51 (SHT 7)	F-6	A	A	12.00	GL	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-13B
HV-51-2F016A	2	M-51 (SHT 5)	G-7	A	A	16.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-39A
HV-51-2F016B	2	M-51 (SHT 7)	G-3	A	A	16.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-39B
HV-51-2F017A	1	M-51 (SHT 5)	F-3	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45A
HV-51-2F017B	1	M-51 (SHT 7)	F-6	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45B
HV-51-2F017C	1	M-51 (SHT 5)	F-3	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45C

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-2F017D	1	M-51 (SHT 7)	G-6	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45D
HV-51-2F021A	2	M-51 (SHT 5)	G-3	A	A	16.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-39A
HV-51-2F021B	2	M-51 (SHT 7)	G-6	A	A	16.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-39B
HV-51-2F024A	2	M-51 (SHT 5)	D-4	B	A	18.00	GL	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-2F024B	2	M-51 (SHT 7)	D-5	B	A	18.00	GL	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-51-2F027A	2	M-51 (SHT 5)	D-3	A	A	6.00	GL	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-205A
HV-51-2F027B	2	M-51 (SHT 7)	E-6	A	A	6.00	GL	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-205B
HV-51-2F040	2	M-51 (SHT 6)	G-3	B	A	4.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-2F041A	1	M-51 (SHT 5)	F-2	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45A
HV-51-2F041B	1	M-51 (SHT 7)	F-7	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45B
HV-51-2F041C	1	M-51 (SHT 5)	F-2	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45C
HV-51-2F041D	1	M-51 (SHT 7)	G-7	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	51-VCS-1	PENT. X-45D
HV-51-2F047A	2	M-51 (SHT 5)	C-7	B	P	18.00	GT	MO	O	O	AI	N	PI-T		
HV-51-2F047B	2	M-51 (SHT 7)	D-2	B	P	18.00	GT	MO	O	O	AI	N	PI-T		
HV-51-2F049	2	M-51 (SHT 6)	G-4	B	A	4.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-51-2F050A	1	M-51 (SHT 5)	E-3	A/C	A	12.00	TC	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B, LP-T	51-ROJ-1	PENT. X-13A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-51-2F050B	1	M-51 (SHT 7)	F-6	A/C	A	12.00	TC	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B, LP-T	51-ROJ-1	PENT. X-13B
HV-51-2F068A	3	M-51 (SHT 6)	B-4	B	A	20.00	GL	MO	OC	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-51-2F068B	3	M-51 (SHT 8)	C-6	B	A	20.00	GL	MO	OC	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-51-2F075	2	M-51 (SHT 6)	D-7	B	P	18.00	GT	MO	C	C	AI	N	PI-T		
HV-51-2F079A	2	M-51 (SHT 6)	E-6	B	A	1.00	GL	AO	OC	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-51-2F079B	2	M-51 (SHT 8)	F-4	B	A	1.00	GL	AO	OC	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-51-2F080A	2	M-51 (SHT 6)	E-7	B	A	1.00	GL	AO	OC	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-51-2F080B	2	M-51 (SHT 8)	F-4	B	A	1.00	GL	AO	OC	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-C-51-2F048A	2	M-51 (SHT 5)	E-7	B	A	18.00	BF	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-C-51-2F048B	2	M-51 (SHT 7)	E-2	B	A	18.00	BF	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-C-51-2F103A	2	M-51 (SHT 6)	C-7	A	P	1.00	GL	MO	C	C	AI	Y	LJ-B, PI-T		PENT. X-239
HV-C-51-2F104B	2	M-51 (SHT 8)	D-4	A	P	1.00	GL	MO	C	C	AI	Y	LJ-B, PI-T		PENT. X-238
PSV-51-205A	2	M-51 (SHT 6)	B-5	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-51-205B	2	M-51 (SHT 8)	C-6	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-51-206A	2	M-51 (SHT 6)	D-6	A/C	A	0.75	RL	SA	C	OC	-	Y	RP-P3, LJ-B		PENT. X-239
PSV-51-206B	2	M-51 (SHT 8)	D-5	A/C	A	0.75	RL	SA	C	OC	-	Y	RP-P3, LJ-B		PENT. X-238

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-51-255	1	M-51 (SHT 5)	E-2	A/C	A	0.75	RL	SA	C	OC	-	Y	RT-P2, LJ-B		PENT. X-12
PSV-51-2F025A	2	M-51 (SHT 5)	G-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-2F025B	2	M-51 (SHT 7)	G-4	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-2F025C	2	M-51 (SHT 5)	G-4	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-2F025D	2	M-51 (SHT 7)	G-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-2F029	2	M-51 (SHT 5)	C-4	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-51-2F030A	2	M-51 (SHT 5)	C-3	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		PENT. X-203A
PSV-51-2F030B	2	M-51 (SHT 7)	C-6	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		PENT. X-203B

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INSERVICE TESTING VALVE TABLE

SYSTEM: 51 RESIDUAL HEAT REMOVAL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-51-2F030C	2	M-51 (SHT 5)	C-2	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		PENT. X-203C
PSV-51-2F030D	2	M-51 (SHT 7)	C-7	C	A	1.00	RL	SA	C	OC	-	N	RP-P3		PENT. X-203D

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
52-2045A	2	M-52 (SHT 4)	E-6	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
52-2045B	2	M-52 (SHT 4)	E-2	C	A	1.50	CK	SA	C	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp2
52-2046A	2	M-52 (SHT 4)	E-5	C	A	1.50	CK	SA	C	C	-	N	BD-Q(O), ET-Q(C)		
52-2048A	2	M-52 (SHT 4)	A-5	C	A	1.00	CK	SA	C	OC	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/2 GVROJ-1 Grp5
52-2048B	2	M-52 (SHT 4)	B-3	C	A	1.00	CK	SA	C	OC	-	N	DI-P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/2 GVROJ-1 Grp5
52-2051A	2	M-52 (SHT 4)	G-2	C	A	1.50	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
52-2051B	2	M-52 (SHT 4)	F-2	C	A	1.50	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
52-2061	2	M-52 (SHT 4)	A-5	C	A	1.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp6
52-2F003A	2	M-52 (SHT 4)	D-6	C	A	12.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
52-2F003B	2	M-52 (SHT 4)	D-3	C	A	12.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
52-2F003C	2	M-52 (SHT 4)	D-5	C	A	12.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
52-2F003D	2	M-52 (SHT 4)	D-1	C	A	12.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
52-2F007A	1	M-52 (SHT 3)	E-7	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
52-2F007B	1	M-52 (SHT 3)	F-7	B	P	12.00	GT	MA	LO	O	-	N	PI-T		
52-2F030A	2	M-52 (SHT 3)	G-4	C	A	2.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring**

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
52-2F030B	2	M-52 (SHT 3)	H-4	C	A	2.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp3
52-2F036A	2	M-52 (SHT 4)	D-7	C	A	3.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
52-2F036B	2	M-52 (SHT 4)	D-3	C	A	3.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
52-2F036C	2	M-52 (SHT 4)	D-5	C	A	3.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
52-2F036D	2	M-52 (SHT 4)	D-1	C	A	3.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
HV-52-208	1	M-52 (SHT 3)	F-6	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-R(O&C), LJ-B, LP-T, PI-T	52-ROJ-1	PENT. X-16B
HV-52-227	2	M-52 (SHT 4)	G-7	A	A	6.00	GT	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-237
HV-52-228	2	M-52 (SHT 4)	G-7	A	A	6.00	GT	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-237

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-52-239	2	M-52 (SHT 3)	A-7	B	A	1.00	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-237
HV-52-2F001A	2	M-52 (SHT 3)	B-6	B	A	16.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-206A
HV-52-2F001B	2	M-52 (SHT 3)	B-8	B	A	16.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-206B
HV-52-2F001C	2	M-52 (SHT 3)	B-6	B	A	16.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-206C
HV-52-2F001D	2	M-52 (SHT 3)	B-8	B	A	16.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-206D
HV-52-2F004A	2	M-52 (SHT 3)	E-5	B	A	12.00	GT	MO	OC	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-52-2F004B	2	M-52 (SHT 3)	F-4	B	A	12.00	GT	MO	OC	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-52-2F005	1	M-52 (SHT 3)	E-6	A	A	12.00	GT	MO	C	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, LP-T, PI-T	52-VCS-1	PENT. X-16A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-52-2F006A	1	M-52 (SHT 3)	E-6	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	52-VCS-1	PENT. X-16A
HV-52-2F006B	1	M-52 (SHT 3)	F-6	A/C	A	12.00	TC	SA	C	OC	-	Y	ET-C(O&C), LJ-B, LP-T, PI-T	52-VCS-1	PENT. X-16B
HV-52-2F015A	2	M-52 (SHT 3)	D-6	B	A	10.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-207A
HV-52-2F015B	2	M-52 (SHT 3)	D-6	B	A	10.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-207B
HV-52-2F031A	2	M-52 (SHT 3)	C-6	B	A	4.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-235
HV-52-2F031B	2	M-52 (SHT 3)	C-6	B	A	4.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-208B
HV-52-2F037	2	M-52 (SHT 3)	F-5	B	A	2.00	GT	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-52-2F039A	1	M-52 (SHT 3)	E-6	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-16A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-52-2F039B	1	M-52 (SHT 3)	F-6	A	P	1.00	GL	AO	C	C	C	Y	LJ-B, LP-T, PI-T		PENT. X-16B
PSV-52-227	2	M-52 (SHT 4)	G-7	A/C	A	0.75	RL	SA	C	OC	-	Y	RP-P3, LJ-B		PENT. X-237
PSV-52-2F012A	2	M-52 (SHT 4)	F-7	C	A	2.00	RL	SA	C	OC	-	N	RT-P3		
PSV-52-2F012B	2	M-52 (SHT 4)	F-3	C	A	2.00	RL	SA	C	OC	-	N	RT-P3		
PSV-52-2F032A	2	M-52 (SHT 4)	B-8	C	A	2.00	RL	SA	C	OC	-	N	RP-P3		
PSV-52-2F032B	2	M-52 (SHT 4)	B-4	C	A	2.00	RL	SA	C	OC	-	N	RP-P3		
PSV-52-2F032C	2	M-52 (SHT 4)	B-6	C	A	2.00	RL	SA	C	OC	-	N	RP-P3		
PSV-52-2F032D	2	M-52 (SHT 4)	B-3	C	A	2.00	RL	SA	C	OC	-	N	RP-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 52 CORE SPRAY

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-52-239	2	M-52 (SHT 3)	A-7	B	A	1.00	GL	SO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		PENT. X-237

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 53 FUEL POOL COOLING AND CLEANUP

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
53-2093	3	M-53 (SHT 3)	H-2	B	A	2.00	GL	MA	C	O	-	N	ET-T		SPENT FUEL POOL MAKEUP, FSAR 9.1.3.3, FSAR
53-2094	3	M-53 (SHT 3)	H-2	B	A	2.00	GL	MA	C	O	-	N	ET-T		SPENT FUEL POOL MAKEUP, FSAR 9.1.3.3, FSAR

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
55-2025	2	M-55 (SHT 2)	A-8	C	A	4.00	CK	SA	OC	OC	-	N	ET-Q(O&C), DI- P6, PT-DI@		**Condition Monitorin** U/2 HPCI Grp2
55-2026	2	M-55 (SHT 2)	A-7	C	A	4.00	CK	SA	OC	OC	-	N	ET-Q(O&C), DI- P6, PT-DI@		**Condition Monitoring** U/2 HPCI Grp2
55-2048	2	M-55 (SHT 2)	E-4	C	A	1.50	CK	SA	OC	OC	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp4
55-2049	2	M-55 (SHT 2)	E-4	C	A	1.50	CK	SA	OC	OC	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp4
55-2058	2	M-55 (SHT 2)	F-4	C	A	8.00	CK	SA	C	O	-	N	DI- P6		**Condition Monitoring** U/2 55-ROJ-2
55-2059	2	M-55 (SHT 2)	D-5	C	A	12.00	CK	SA	C	O	-	N	DI- P6		**Condition Monitoring** U/2 55-ROJ-2
55-2F005	2	M-55 (SHT 2)	D-4	C	A	14.00	CK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)		
55-2F019	2	M-55 (SHT 2)	F-3	C	A	16.00	CK	SA	OC	O	-	N	DI- P6, PT-DI@, ET-Q(O)		**Condition Monitoring** U/2 55-ROJ-1

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
55-2F021	-	M-55 (SHT 2)	C-4	C	A	12.00	SK	SA	OC	O	-	N	BD-Q(C), ET-Q(O)	55-VCS-3	
55-2F045	2	M-55 (SHT 2)	B-6	C	A	16.00	CK	SA	C	O	-	N	DI- P6 PT-DI@, PT-Q		**Condition Monitoring** U/2 55-ROJ-1
55-2F046	2	M-55 (SHT 2)	C-3	C	A	4.00	CK	SA	OC	O	-	N	DI- P6 PT-DI@, ET-Q(O)		**Condition Monitoring** U/2 HPCI Grp1
55-2F078	2	M-55 (SHT 2)	B-5	C	A	2.00	CK	SA	OC	C	-	N	DI-P6, PT-DI@		**Condition Monitoring** U/2 GVROJ-1 Grp3
55-2F080	2	M-55 (SHT 2)	A-8	C	A	4.00	CK	SA	OC	OC	-	N	ET-Q(O&C), DI- P6, PT-DI@		**Condition Monitoring** U/2 HPCI Grp2
55-2F094	2	M-55 (SHT 2)	A-7	C	A	4.00	CK	SA	OC	OC	-	N	ET-Q(O&C), DI- P6, PT-DI@		**Condition Monitoring** U/2 HPCI Grp2
HV-55-220	2	M-55 (SHT 2)	B-6	B	A	2.00	GL	MO	O	OC	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-219B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-55-221	2	M-55 (SHT 2)	B-6	B	A	2.00	GL	MO	O	OC	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-219A
HV-55-2F001	2	M-55 (SHT 2)	D-2	B	A	12.00	GT	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-55-2F002	1	M-55 (SHT 2)	F-6	A	A	10.00	GL	MO	O	OC	AI	Y	ET-C, ST-C(O&C), LJ-B, PI-T	55-VCS-1	PENT. X-11
HV-55-2F003	1	M-55 (SHT 2)	F-6	A	A	10.00	GL	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-11
HV-55-2F004	2	M-55 (SHT 2)	F-3	B	A	16.00	GT	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-55-2F006	2	M-55 (SHT 2)	D-5	B	A	12.00	GT	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
HV-55-2F007	2	M-55 (SHT 2)	D-4	B	P	14.00	GT	MO	O	O	AI	N	PI-T		
HV-55-2F008	2	M-55 (SHT 2)	E-4	B	A	10.00	GL	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-55-2F011	2	M-55 (SHT 2)	G-4	B	A	10.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-55-2F012	2	M-55 (SHT 2)	C-6	B	A	4.00	GL	MO	OC	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-236
HV-55-2F028	2	M-55 (SHT 2)	C-2	B	A	1.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-55-2F029	2	M-55 (SHT 2)	B-2	B	A	1.00	GL	AO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
HV-55-2F041	2	M-55 (SHT 2)	E-3	B	A	16.00	BF	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-55-2F042	2	M-55 (SHT 2)	B-7	B	A	16.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-209
HV-55-2F071	2	M-55 (SHT 2)	C-6	B	A	4.00	GT	MO	OC	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-212
HV-55-2F072	2	M-55 (SHT 2)	C-6	B	A	12.00	GT	MO	O	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		PENT. X-210

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-55-2F093	2	M-55 (SHT 2)	A-6	A	A	4.00	GT	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-228D
HV-55-2F095	2	M-55 (SHT 2)	C-8	A	A	4.00	GT	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-228D
HV-55-2F100	1	M-55 (SHT 2)	F-6	A	A	1.50	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-11
HV-55-2F105	2	M-55 (SHT 2)	F-4	A	A	8.00	GT	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-9A

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 55 HIGH PRESSURE COOLANT INJECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
56-2F048	2	M-56 (SHT 2)	B-5	C	A	2.00	CK	SA	OC	OC	-	N	ET-Q(O&C)		
56-2F057	2	M-56 (SHT 2)	B-4		A	2.00	CK	SA	OC	O	-	N			SKID MOUNTED TP-EXE-IST-00-04
FV-56-211	2	M-56 (SHT 2)	G-3		A	10.00	GL	HYD	C	O	C	N			SKID MOUNTED TP-EXE-IST-00-04
FV-56-212	2	M-56 (SHT 2)	G-3		A	10.00	GL	HYD	C	OC	C	N			SKID MOUNTED TP-EXE-IST-00-04
HV-56-2F059	2	M-56 (SHT 2)	D-6	B	A	2.00	GL	MO	C	OC	AI	N	ET-Q, ST-Q(O&C), PI-T		
PSE-56-2D003	2	M-56 (SHT 2)	F-4	D	A	16.00	RD	SA	C	O	-	N	RD-P2		
PSE-56-2D004	2	M-56 (SHT 2)	H-4	D	A	16.00	RD	SA	C	O	-	N	RD-P2		
PSV-56-2F020	2	M-56 (SHT 2)	G-6	C	A	0.75	RL	SA	C	OC	-	N	RP-P3		
PSV-56-2F050	2	M-56 (SHT 2)	C-5	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
FV-DO-201A	2	M-58 (SHT 3)	C-7	A	A	4.00	GL	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-26
FV-DO-201B	2	M-58 (SHT 4)	C-7	A	A	4.00	GL	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-25
HV-57-204	2	M-57 (SHT 5)	E-7	A	A	18.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-202
HV-57-205	2	M-57 (SHT 5)	D-6	A	A	2.00	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-202
HV-57-209	2	M-57 (SHT 4)	E-5	A	A	6.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-25, X-201A
HV-57-210A	2	M-57 (SHT 5)	E-8	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-57-210B	2	M-57 (SHT 4)	F-3	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-211	2	M-57 (SHT 5)	G-5	A	A	2.00	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-26
HV-57-212	2	M-57 (SHT 5)	F-7	A	A	18.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-202
HV-57-214	2	M-57 (SHT 5)	F-6	A	A	24.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-26
HV-57-215	2	M-57 (SHT 5)	G-6	A	A	24.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-26
HV-57-216	2	M-57 (SHT 4)	F-5	A	A	1.50	GL	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-62
HV-57-217	2	M-57 (SHT 5)	G-5	A	A	2.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-26
HV-57-218	2	M-57 (SHT 5)	E-6	A	A	2.00	GL	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-202

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-57-221	2	M-57 (SHT 4)	D-5	A	A	6.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-25, X-201A
HV-57-223	2	M-57 (SHT 4)	D-4	A	A	24.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-25
HV-57-224	2	M-57 (SHT 4)	D-4	A	A	24.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-201A
HV-57-231	2	M-57 (SHT 4)	D-5	A	A	6.00	BF	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-201A, X-25
HV-57-235	2	M-57 (SHT 4)	D-4	A	A	24.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-25
HV-57-247	2	M-57 (SHT 4)	D-3	A	A	24.00	BF	MO	OC	C	AI	Y	ET-Q, ST-Q(C), LJ-B, PI-T		PENT. X-201A
HV-57-260A	3	M-57 (SHT 4)	G-5	B	A	6.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C),PI-T		
HV-57-260B	3	M-57 (SHT 4)	G-5	B	A	6.00	GT	MO	O	C	AI	N	ET-Q, ST-Q(C),PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-57-261	2	M-57 (SHT 5)	E-7	A	A	4.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-26
HV-57-262	2	M-57 (SHT 5)	C-6	A	A	6.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-202
HV-57-263	2	M-57 (SHT 4)	D-3	A	A	4.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-25
HV-57-264	2	M-57 (SHT 4)	C-3	A	A	6.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-201A
HV-57-265	3	M-57 (SHT 4)	G-6	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-266	2	M-57 (SHT 5)	C-7	A	A	6.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-202
HV-57-267	3	M-57 (SHT 4)	F-6	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-268A	2	M-57 (SHT 5)	E-8	B	A	1.50	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-57-268B	2	M-57 (SHT 4)	F-3	B	A	1.50	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-57-269	2	M-57 (SHT 4)	C-3	A	A	6.00	BF	MO	C	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-201A
PSV-57-237A-1	2	M-57 (SHT 5)	G-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-237A-2	2	M-57 (SHT 5)	G-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-237B-1	2	M-57 (SHT 5)	E-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-237B-2	2	M-57 (SHT 5)	E-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-237C-1	2	M-57 (SHT 5)	C-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-237C-2	2	M-57 (SHT 5)	C-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-57-237D-1	2	M-57 (SHT 5)	A-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-237D-2	2	M-57 (SHT 5)	A-3	C	A	24.00	VR	SA	C	OC	-	N	RT-P3, PI-T		
PSV-57-262	2	M-57 (SHT 5)	C-8	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-57-264	2	M-57 (SHT 4)	C-2	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
SV-57-201	2	M-57 (SHT 4)	B-6	B	A	2.00	GL	SO	O	OC	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		PENT. X-229A
SV-57-232	2	M-57 (SHT 4)	E-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28A-2
SV-57-233	2	M-57 (SHT 4)	E-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28B
SV-57-234	2	M-57 (SHT 4)	E-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-28A-3

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Limerick Unit 1 & 2

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-57-239	2	M-57 (SHT 5)	G-6	B	A	0.50	GL	SO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		PENT. X-26
SV-57-241	2	M-57 (SHT 4)	A-5	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-221A
SV-57-242	2	M-57 (SHT 4)	A-4	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28A-2
SV-57-243	2	M-57 (SHT 4)	A-4	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-28B
SV-57-244	2	M-57 (SHT 4)	A-4	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-28A-3
SV-57-245	2	M-57 (SHT 4)	B-3	A	A	0.50	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-26
SV-57-246A	2	M-57 (SHT 5)	A-6	B	P	1.00	GL	SO	C	C	C	N	PI-T		
SV-57-246B	2	M-57 (SHT 4)	A-5	B	P	1.00	GL	SO	C	C	C	N	PI-T		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD CAT	VALVE PAS	ACTV/ SIZE	TYPE	VALVE TYPE	ACT NRM	POSITION SAF	FAL	TYPE C	APP. J (POSITION)	TEST TYPE-FREQUENCY NUMBER	VRR/VCS/ROJ	REMARKS
SV-57-247A	2	M-57 (SHT 5)	A-6	B	P	1.00	GL	SO	C	C	C	N	PI-T		
SV-57-247B	2	M-57 (SHT 4)	A-5	B	P	1.00	GL	SO	C	C	C	N	PI-T		
SV-57-250	2	M-57 (SHT 4)	D-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-62
SV-57-259	2	M-57 (SHT 4)	A-5	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-62
SV-57-281	2	M-57 (SHT 4)	C-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-221A
SV-57-283	2	M-57 (SHT 5)	C-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-221B
SV-57-284	2	M-57 (SHT 5)	B-7	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-221A

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 57 CONTAINMENT ATMOSPHERIC CONTROL

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
SV-57-285	2	M-57 (SHT 5)	B-7	A	A	0.50	GL	SO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-202
SV-57-286	2	M-57 (SHT 5)	B-7	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-221B
SV-57-290	2	M-57 (SHT 5)	B-6	A	A	1.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-220A
SV-57-291	2	M-57 (SHT 5)	C-6	A	A	2.00	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C), LJ-B, PI-T		PENT. X-220A
SV-57-295	2	M-57 (SHT 5)	B-6	A	A	0.50	GL	SO	O	OC	C	Y	ET-Q, FS-Q(C), ST-Q(O&C),LJ-B, PI-T		PENT. X-28B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
59-2001	2	M-59 (SHT 3)	B-5	A/C	A	1.00	CK	SA	OC	C	-	Y	BD-RO), ET-R(C), LJ-B	59-ROJ-1	PENT. X-218
59-2005A	2	M-59 (SHT 3)	E-5	A/C	A	1.00	CK	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B	59-ROJ-1	PENT. X-40H-1
59-2005B	2	M-59 (SHT 3)	F-5	A/C	A	1.00	CK	SA	OC	C	-	Y	BD-R(O), ET-R(C), LJ-B	59-ROJ-1	PENT. X-3B
59-2023E	3	M-59 (SHT 3)	H-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.
59-2023H	3	M-59 (SHT 3)	G-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.
59-2023K	3	M-59 (SHT 3)	H-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
59-2023M	3	M-59 (SHT 3)	G-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.
59-2023S	3	M-59 (SHT 3)	G-3	A/C	A	1.00	CK	SA	OC	OC	-	N	ET-R(O&C), LP-T	59-ROJ-1	AS PER FSAR QUESTION 271.2. ALLOWABLE LEAKAGE RATE NOT TO EXCEED 78 SCC/MIN.
59-2024E	3	M-59 (SHT 3)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	
59-2024H	3	M-59 (SHT 3)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	
59-2024K	3	M-59 (SHT 3)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	
59-2024M	3	M-59 (SHT 3)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	
59-2024S	3	M-59 (SHT 3)	G-4	C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C)	59-ROJ-1	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
59-2056	2	M-59 (SHT 3)	D-5	A/C	A	1.00	CK	SA	OC	C	-	Y	ET-R(C), LJ-B	59-ROJ-1	PENT. X-35B
59-2112	2	M-59 (SHT 3)	H-4	A/C	A	1.00	CK	SA	OC	OC	-	Y	ET-R(O&C), LJ-B	59-ROJ-1	PENT. X-3D-2
59-2128	2	M-59 (SHT 3)	G-4	A/C	A	1.00	CK	SA	OC	OC	-	Y	ET-R(O&C), LJ-B	59-ROJ-1	PENT. X-27A
59-2131E	3	M-59 (SHT 3)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	
59-2131H	3	M-59 (SHT 3)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	
59-2131K	3	M-59 (SHT 3)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
59-2131M	3	M-59 (SHT 3)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	
59-2131S	3	M-59 (SHT 3)	G-3	A/C	A	1.00	CK	SA	OC	C	-	N	BD-R(O), ET-R(C), LP-T	59-ROJ-1	
HV-59-201	2	M-59 (SHT 3)	C-5	A	A	1.50	GL	MO	O	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	59-VCS-2	PENT. X-40F-2
HV-59-202	2	M-59 (SHT 3)	C-5	A	A	1.00	GL	AO	O	C	C	Y	ET-C, FS-C(C), ST-C(C), LJ-B, PI-T	59-VCS-1	PENT. X-40F-2
HV-59-229A	2	M-59 (SHT 3)	E-5	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-40H-1
HV-59-229B	2	M-59 (SHT 3)	F-5	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-3B
HV-59-231	2	M-59 (SHT 3)	D-5	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	POSITION SAF	POSITION FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-59-235	2	M-59 (SHT 3)	B-5	A	A	1.00	GL	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-218
HV-59-240	SR	M-59 (SHT 4)	G-5	B	A	1.00	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-59-241	SR	M-59 (SHT 4)	G-4	B	A	1.00	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		
HV-59-242	SR	M-59 (SHT 4)	H-5	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-59-243	SR	M-59 (SHT 4)	H-6	B	A	1.00	GL	MO	C	O	AI	N	ET-Q, ST-Q(O), PI-T		
HV-59-251A	2	M-59 (SHT 3)	G-5	A	A	1.00	GL	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-27A
HV-59-251B	2	M-59 (SHT 3)	H-5	A	A	1.00	GL	MO	O	OC	AI	Y	ET-Q, ST-Q(O&C), LJ-B, PI-T		PENT. X-3D-2
PSV-59-252A	3	M-59 (SHT 3)	F-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
PSV-59-252B	3	M-59 (SHT 3)	H-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-59-253A	3	M-59 (SHT 3)	F-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
PSV-59-253B	3	M-59 (SHT 3)	H-7	C	A	1.00	RL	SA	C	OC	-	N	RT-P3		
SV-59-250A	3	M-59 (SHT 3)	G-6	B	A	1.00	GL	SO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
SV-59-250B	3	M-59 (SHT 3)	H-6	B	A	1.00	GL	SO	O	C	C	N	ET-Q, FS-Q(C), ST-Q(C), PI-T		
SV-59-252A	3	M-59 (SHT 3)	F-6	B	A	1.00	GL	SO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
SV-59-252B	3	M-59 (SHT 3)	H-6	B	A	1.00	GL	SO	C	O	O	N	ET-Q, FS-Q(O), ST-Q(O), PI-T		
XV-59-240A	2	M-59 (SHT 3)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35C

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
XV-59-240B	2	M-59 (SHT 3)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35D
XV-59-240C	2	M-59 (SHT 3)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35E
XV-59-240D	2	M-59 (SHT 3)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35F
XV-59-240E	2	M-59 (SHT 3)	D-6	D	A	.375	EX	EX	O	C	AI	N	XT-P5		PENT. X-35G
XV-59-241A	2	M-59 (SHT 3)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35C
XV-59-241B	2	M-59 (SHT 3)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35D
XV-59-241C	2	M-59 (SHT 3)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35E
XV-59-241D	2	M-59 (SHT 3)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35F

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 59 PRIMARY CONTAINMENT INSTRUMENT GAS

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
XV-59-241E	2	M-59 (SHT 3)	D-6	A	A	.375	BL	SO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-35G

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 60 PRIMARY CONTAINMENT LEAK TESTING

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
60-2057	2	M-60 (SHT 2)	F-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-40G-1
60-2058	2	M-60 (SHT 2)	F-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-40G-1
60-2070	2	M-60 (SHT 2)	D-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-40G-2
60-2071	2	M-60 (SHT 2)	D-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. 40G-2
60-2073	2	M-60 (SHT 2)	C-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-227
60-2074	2	M-60 (SHT 2)	C-4	A	P	0.75	GL	MA	LC	C	-	Y	LJ-B		PENT. X-227

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 61 LIQUID RADWASTE COLLECTION

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-61-210	2	M-61 (SHT 4)	F-5	A	A	4.00	GT	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-231A
HV-61-211	2	M-61 (SHT 4)	F-5	A	A	4.00	GT	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-231A
HV-61-212	2	M-61 (SHT 4)	G-4	B	A	1.50	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-230B
HV-61-230	2	M-61 (SHT 4)	B-5	A	A	4.00	GT	AO	O	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-231B
HV-61-231	2	M-61 (SHT 4)	B-5	A	A	4.00	GT	AO	OC	C	C	Y	ET-Q, FS-Q(C), ST-Q(C), LJ-B, PI-T		PENT. X-231B
HV-61-232	2	M-61 (SHT 4)	C-5	B	A	1.50	GL	MO	O	C	AI	N	ET-Q, ST-Q(C), PI-T		PENT. X-230B

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 87 DRYWELL CHILLED WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-87-220A	2	M-87 (SHT 9)	C-4	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-53, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-220B	2	M-87 (SHT 9)	B-4	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-55, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-221A	2	M-87 (SHT 9)	C-4	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-54, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-221B	2	M-87 (SHT 9)	A-4	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-56, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-222	2	M-87 (SHT 9)	B-5	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-55
HV-87-223	2	M-87 (SHT 9)	A-5	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-56
HV-87-224A	2	M-87 (SHT 9)	B-4	A	P	8.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-54, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.

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INSERVICE TESTING VALVE TABLE

LIMERICK GENERATING STATION- UNIT 2

SYSTEM: 87 DRYWELL CHILLED WATER

VALVE NUMBER	CODE CLASS	P&ID	COORD	VALVE CAT	ACTV/ PAS	SIZE	VALVE TYPE	ACT TYPE	POSITION NRM	SAF	FAL	APP. J TYPE C	TEST TYPE-FREQUENCY (POSITION)	VRR/VCS/ROJ NUMBER	REMARKS
HV-87-224B	2	M-87 (SHT 9)	A-4	A	P	8.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-56, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-225A	2	M-87 (SHT 9)	C-4	A	P	8.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-53, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-225B	2	M-87 (SHT 9)	B-4	A	P	8.00	GT	MO	LC	C	AI	Y	LJ-B		PENT. X-55, CLASS 2 EQUIVALENT PER FSAR 3.2.2.g.
HV-87-228	2	M-87 (SHT 9)	C-5	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-53
HV-87-229	2	M-87 (SHT 9)	C-5	A	A	8.00	GT	MO	OC	C	AI	Y	ET-C, ST-C(C), LJ-B, PI-T	87-VCS-1	PENT. X-54

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