Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

October 2, 2013

10 CFR 50.4
10 CFR 50.55a

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Docket Nos. 50-259, 50-260, and 50-296

Subject: **Inservice Testing Program for the Fourth Ten Year Interval for Browns Ferry Nuclear Plant, Units 1, 2, and 3**

In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 50.55a and Section ISTA-3200(a) of American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code), 2004 Edition through 2006 Addenda, Tennessee Valley Authority (TVA) is required to submit the Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3, Inservice Testing (IST) Program for the Fourth Ten Year IST Interval to the Nuclear Regulatory Commision (NRC).

The enclosure to this letter provides the IST Program for the Fourth Ten Year IST Interval. The Fourth Ten Year IST Interval for BFN, Units 1, 2, and 3, began on January 1, 2013 and ends August 30, 2022. The length of the Fourth Ten Year IST Interval has been reduced to compensate for the extension of the Third 10 Year IST Interval as required by OM Code, ISTA-3120(e).

If you have any questions, or require additional information, please contact Ed Schrull at (423) 751-3850.

Respectfully,

J. W. Shea
Vice President, Nuclear Licensing

Enclosure: Browns Ferry Nuclear Plant, Units 1, 2, and 3 Inservice Testing Program (0-TI-362)

cc: See Page 2

A047

NRR

cc (Enclosure):

NRC Regional Administrator – Region II
NRC Senior Resident Inspector – Browns Ferry Nuclear Plant

ENCLOSURE

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Inservice Testing Program (0-TI-362)

Browns Ferry Nuclear Plant

Unit 0

Technical Instruction

0-TI-362

Inservice Testing Program

Revision 0040

Quality Related

Level of Use: Information Use

Effective Date: 09-20-2013

Responsible Organization: PGM, Engineering Programs Group

Prepared By: Earl M. Ridgell

Approved By: John E. Colvin

Current Revision Description

Type of Change: Intent Tracking Number: 041

PCRs: None

PERs: SR 778129

Pages: 4, 26, 27, 28, 29, 30, and 239

SR 778129

Added paragraph to Appendix G for Performance of As-Found Tests in order to provide guidance on the tests required to be performed and the allowances for when the test should be performed.

Other editorial corrections were made throughout the main body of the procedure. No changes were made to the attachments other than Appendix G, addressed above.

Table Contents

1 INTRODUCTION

1.1 Purpose

This procedure represents the Browns Ferry Nuclear Plant (BFN) Inservice Testing (IST) Program developed to satisfy the requirements stipulated in Code of Federal Regulations, Title 10, Part 50.55a (10CFR50.55a), paragraph (f) and Technical Specification 5.5.6. It is applicable to all three units at BFN.

[BFN/PER/CAPR] This procedure was determined to require source noting for BFN PER 369800-224 which was a CAPR to perform a self assessment of the IST program. [BFN PER 369800-224]

1.2 Scope

The IST Program establishes the testing and examination requirement to assess operational readiness of certain ASME Code Class 1, 2, and 3 (equivalent) components important to nuclear safety. These requirements apply to:

A Pumps and valves required to perform a specific function in shutting down the reactor to safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of an accident;

B Pressure relief devices that protect systems or portions of systems that perform one or more of these functions.

All three BFN units are licensed as Hot Shutdown (Mode 3) for the safe shutdown condition.

Snubbers are not in scope of the BFN IST Program at the present time. They are in scope of the BFN Inservice Inspection (ISI) Programs for each unit as described in procedures 1-SI-4.6.G for Unit 1, 2-SI-4.6.G for Unit 2, and 3-SI-4.6.G for Unit 3. Additional information is provided in Section 1.6.2.

1.3 Owner Information and Interval Dates

Pertinent Owner information and dates are provided in the table below.

Owner	Tennessee Valley Authority		
Address of Corporate Office	Chattanooga Office Complex 1101 Market St. Chattanooga, TN 37402-2801		
Name and Address of Power Plant	Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609		
Applicable Nuclear Power Units	**BFN Unit 1**	**BFN Unit 2**	**BFN Unit 3**
Construction Permit Date	Permit issued prior to May 10, 1967	Permit issued prior to January 1, 1971	July 31, 1968
Commercial Operation Date	August 1, 1974	March 1, 1975	March 1, 1977
First 10 year IST Interval (RIMS A028803203008 provides clarification)	August 31, 1982 to August 30, 1992	August 31, 1982 to August 30, 1992	August 31, 1982 to August 30, 1992
Second 10 year IST Interval	August 31, 1992 to August 30, 2002	August 31, 1992 to August 30, 2002	August 31, 1992 to August 30, 2002
Third 10 year IST Interval	August 31, 2002 to December 31, 2012	August 31, 2002 to December 31, 2012	August 31, 2002 to December 31, 2012
Fourth 10 Year IST Interval	January 1, 2013 to August 30, 2022	January 1, 2013 to August 30, 2022	January 1, 2013 to August 30, 2022

The Fourth 10 Year IST Interval has been reduced to compensate for extension of the Third 10 Year IST Interval as required by OM Code, ISTA-3120(e)

1.4 Extended Operating License

The fourth 10 year IST interval will overlap the original license expiration date and extended license timeframes. Information pertaining to the original operating license expiration dates and extended license dates is provided below for each BFN unit.

Applicable Nuclear Power Units	BFN Unit 1	BFN Unit 2	BFN Unit 3
Original License Expiration Date	Was to expire on December 20, 2013	Was to expire on June 28, 2014	Was to expire on July 2, 2016
Extended License Expiration Date	Renewed License No DPR-33 Expires at midnight December 20, 2033	Renewed License No DPR-33 Expires at midnight June 28, 2034	Renewed License No DPR-68 Expires at midnight July 2, 2036

1.5 Regulatory Requirements and BFN Compliance

1.5.1 Code of Record

Licensees of boiling water reactors are required by 10CFR50.55a paragraphs (f)(1), (f)(4)(ii), and (f)(5)(i) to revise their IST Program at 120 month (10 year) intervals to comply with the requirements of the latest edition and addenda of Code incorporated by reference in paragraph 10CFR50.55a(b) 12 months before the start of the 120 month interval, subject to the conditions listed 10CFR50.55a(b).

Based on the above requirements, the code of record for the fourth 10 year IST interval is the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code), 2004 Edition through 2006 Addenda. The BFN IST Program presented in this procedure complies with the requirements of this code of record.

1.5.2 Conditions Applicable to Code of Record

The applicable conditions of 10CFR50.55a, paragraph (b)(3) are provided below with an explanation of BFN's method of addressing each condition.

A. (b)(3)(i) Quality Assurance

The quality assurance program implemented by BFN is the TVA Nuclear Quality Assurance Program Plan (TVA-NQA-PLN89-A). This program is in accordance with 10CFR50, Appendix B. BFN has elected not to use ASME NQA-1, "Quality Assurance Requirements for Nuclear Facilities," 1979 Addenda.

B. (b)(3)(ii) Motor Operated Valves Testing - BFN

Procedure NETP-115, MOV Program, describes the program used at BFN to ensure that motor operated valves continue to be capable of performing their design basis safety functions.

C. (b)(3)(v) Subsection ISTD

As required by this condition, snubbers are tested in accordance with the BFN ISI Program which incorporates Article IWF-5000, "Inservice Inspection Requirements for Snubbers" of the ASME B&PV Code, Section XI.

BFN has elected not to use OM Code, ISTD for snubbers as permitted by condition (b)(3)(v)(A). Furthermore, condition (b)(3)(v)(B) is not applicable to BFN because the B&PV, Section XI code of record for the BFN ISI Programs are the 2001 Edition through 2003 Addenda for Unit 1 and Unit 3, and the 2004 Edition for Unit 2.

1.5.3 Code Cases

In accordance with 10CFR50.55a, paragraph (b)(6), code cases referenced in Regulatory Guide (RG) 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code," may be used without prior NRC approval subject to the requirements of (b)(6)(i) through (b)(6)(iii). However, at this time, BFN has not elected to adopt any of the code cases approved for use in RG 1.192. This position may change as new code cases are approved in future revisions of RG 1.192.

1.5.4 Requests for Relief

In accordance with 10CFR50.55a, paragraphs (a)(3)(i), (a)(3)(ii), and (f)(5)(iv), licensees may submit a request for relief from code requirements. However, at this time, BFN has determined the IST Program can comply with the Code of Record as written and no requests for relief are necessary.

1.5.5 Clarification of Valve Test Methods

Clarification of valve test methods are provided in Appendix D of this procedure or, in some cases, embedded in procedure 0-TI-362(BASES) to document BFN's position or approach in areas where the Code of Record allows the Owner to specify requirements, methods, acceptance criteria, or when clarification of BFN's compliance with the code requirements is justified.

1.5.6 NUREG-1482

The NRC published NUREG-1482, "Guidelines for Inservice Testing at Nuclear Power Plants," to provide licensees guidance and recommendations for developing and implementing IST Programs. It is recognized that this document does not contain any requirements. However, the guidance provided was used in development of the BFN IST Program where applicable.

2 REFERENCES

A. Code of Federal Regulations, Title 10, Part 50.55a, Dated January 1, 2012

B. ASME OM Code, Code for Operation and Maintenance of Nuclear Power Plants, 2004 Edition through 2006 Addenda

C. NUREG-1482, Revision 1, Guidelines for Inservice Testing at Nuclear Power Plants

D. Regulatory Guide 1.192, Operation and Maintenance Code Case Applicability, ASME OM Code

E. Regulatory Guide 1.193, ASME Code Cases Not Approved For Use

F. ASME OM Code Interpretation 98-8

G. ASME OM Code Interpretation 01-1

H. TVA-NQA-PLN89-A, TVA Nuclear Quality Assurance Program Plan

I. NPG-SPP-09.1, ASME Code and Augmented Programs

J. NETP-116, Inservice Testing Program Code and Administrative Requirements

K. NETP-116.1, Inservice Testing Program Administrative Process for Component Evaluations and Reference Values

L. NETP-116.2, Inservice Testing Program Trending Requirements

M. NETP-116.3, Inservice Testing Program Preconditioning Guidelines

2 **REFERENCES** (Continued)

N. NETP-116.4, IST Program Relief Valve Testing Requirements

O. NETP-116.5, IIST Program Check Valve Condition Monitoring Requirements

P. BFN Technical Specifications Unit 1, Unit 2, and Unit 3

Q. BFN Final Safety Analysis Report, Sectoin 4.12

R. 1-SI-4.6.G, Inservice Inspection and Risk-Informed Inservice Inspection Program

S. 2-SI-4.6.G, Inservice Inspection and Risk-Informed Inservice Inspection Program Unit 2

T. 3-SI-4.6.G, Inservice Inspection and Risk-Informed Inservice Inspection Program Unit 3

U. 0-TI-360, Containment Leak Rate Programs

V. 0-TI-362(BASES), Inservice Testing Program Bases Document

W. 0-TI-443, Check Valve Condition Monitoring Program

X. 0-TI-444, Augmented Inservice Testing Program

Y. 0-TI-577, Inservice Testing of Safety and Relief Valves

Z. 0-SR-3.4.3.1.a, Bench Test Relief Valves As Left

AA. 0-SR-3.4.3.1.b, Bench Test Relief Valves As Found

BB. 1-SR-3.4.3.2, Main Steam Relief Valves Manual Cycle Test

CC. 2-SR-3.4.3.2, Main Steam Relief Valves Manual Cycle Test

DD. 3-SR-3.4.3.2, Main Steam Relief Valves Manual Cycle Test

EE. RIMS A02880323008, Exemption from 10 CFR Part 50.55a(g)(4), Inservice Testing (IST) Pump and Valve Program Interval (TAC 11324, 11325, 11326)

FF. RIMS L448706190805, TVA Response to NRC Generic Letter 87-06

GG. RIMS R08880706001, NRC Closeout of TVA's Response to GL 87-06

HH. RIMS L29120815801, ASME OM Code Inquiry Regarding MSRV Pilot Valve - Record 10-1980

2 **REFERENCES** (Continued)

II. MCI-0-001-VLV002, Main Steam Relief Valves Target Rock Model 7567 Disassembly, Inspection, Rework and Reassembly

JJ. Wyle Test Procedure 1030

KK. BFN PER 369800

3 PROGRAM DEVELOPMENT

3.1 Development of Program Scope

The methodology used to develop the scope for the BFN IST Program is described below.

A TVA upper tier procedures NPG-SPP-09.1 and NETP-116.series (or Code of Record if NEPT-116.series not available) were used in development of the BFN IST Program.

B In accordance with 10CFR50.55a, paragraph (f), the consideration for scope of the IST Program was limited to Code Class 1, 2, and 3 (equivalent) components. There are no Code Class MC (equivalent) pumps, valves, or pressure relief devices at BFN.

C The BFN ASME Section XI Code Class Boundary Drawings (developed in accordance with Regulatory Guide 1.26) were used to identify the Code Class 1, 2, and 3 (equivalent) components. These drawings are a color coded version of the BFN system flow diagrams and are numbered the same as the flow diagram with an "-ISI" extension at the end. A complete list of the flow diagrams and color coded ISI drawings is provided in Section 3.2.

D The Final Safety Analysis, Technical Specifications and Bases (Unit 1, 2, and 3), and all System Design Criteria Documents (SDCDs) were reviewed to determine the nuclear safety related functions credited at BFN.

E The function(s) of each component within the Code Class 1, 2, and 3 (equivalent) boundaries shown on the ASME Section XI Code Class Boundary Drawings were reviewed. Based on this review, each component was determined to be "in scope" or "exempt from scope" of the Code of Record (ASME OM Code, 2004 Edition through 2006 Addenda). The component functions and scope determination are documented in 0-TI-362(BASES), Inservice Testing Program Bases Document.

F Pumps, valves, and pressure relief devices in scope of the IST Program are shown in Appendix A, Pump Test Plan, and Appendix B, Valve Test Plan. An explanation of the abbreviations used in these appendices is provided in Section 3.3 and Section 3.4.

A list of components exempt from the IST Program and the basis for exemption are provided in Appendix E, Code Class 1, 2, and 3 Pumps Exempt from IST Program and Appendix F, Code Class 1, 2, and 3 Valves Exempt from IST Program.

3.2 Applicable Flow Diagrams, ISI Drawings, and Design Criteria

The table below provides a list of the systems in scope of IST Program along with the associated SDCDs, flow diagrams, and ASME Section XI color code class boundary drawings used in development of the program scope.

System No	System Name	Associated Design Criteria Document	Associated Flow Diagram	Associated ASME Section XI Code Class Boundary Drawing
01	Main Steam System	BFN-50-7001	1-47E801-1	1-47E801-1-ISI
			1-47E801-2	1-47E801-2-ISI
			1-47E807-2	1-47E807-2-ISI
			2-47E801-1	2-47E801-1-ISI
			2-47E801-2	2-47E801-2-ISI
			2-47E807-2	2-47E807-2-ISI
			3-47E801-1	3-47E801-1-ISI
			3-47E801-2	3-47E801-2-ISI
			3-47E807-2	3-47E807-2-ISI
03	Reactor Feedwater System	BFN-50-7003	1-47E803-1	1-47E803-1-ISI
			1-47E803-5	1-47E803-5-ISI
			1-47E817-1	1-47E817-1-ISI
			2-47E803-1	2-47E803-1-ISI
			2-47E803-5	2-47E803-5-ISI
			2-47E817-1	2-47E817-1-ISI
			3-47E803-1	3-47E803-1-ISI
			3-47E803-5	3-47E803-5-ISI
			3-47E817-1	3-47E817-1-ISI
06	Heater Drains and Vent System	BFN-50-7001	1-47E801-2	1-47E801-2-ISI
			1-47E805-3	1-47E805-3-ISI
			1-47E807-1	1-47E807-1-ISI
			1-47E807-2	1-47E807-2-ISI
			2-47E801-2	2-47E801-2-IS
			2-47E805-3	2-47E805-3-ISI
			2-47E807-1	2-47E807-1-ISI
			2-47E807-2	2-47E807-2-ISI
			3-47E801-2	3-47E801-2-IS
			3-47E805-3	3-47E805-3-ISI
			3-47E807-1	3-47E807-1-ISI
			3-47E807-2	3-47E807-2-ISI
10	Boiler Drains and Vents and Blowdown System	BFN-50-7010	1-47E817-1	1-47E817-1-ISI
			2-47E817-1	2-47E817-1-ISI
			3-47E817-1	3-47E817-1-ISI

3.2 **Applicable Flow Diagrams, ISI Drawings, and Design Criteria** (Continued)

System No	System Name	Associated Design Criteria Document	Associated Flow Diagram	Associated ASME Section XI Code Class Boundary Drawing
12	Auxiliary Boiler System	BFN-50-7001	0-47E815-1 1-47E815-3 2-47E815-4 3-47E815-5	0-47E815-1-ISI 1-47E815-3-ISI 2-47E815-4-ISI 3-47E815-5-ISI
23	Residual Heat Removal Service Water System	BFN-50-7023	1-47E858-1 2-47E858-1 3-47E858-1	1-47E858-1-ISI 2-47E858-1-ISI 3-47E858-1-ISI
24	Raw Cooling Water System	BFN-50-7024	2-47E844-2	2-47E844-2-ISI
43	Sampling and Water Quality System	BFN-50-D764 BFN-50-7023 BFN-50-7074	1-47E610-43-1 1-47E811-1 1-47E817-1 1-47E867-3 2-47E610-43-1 2-47E811-1 2-47E860-1 2-47E867-3 3-47E811-1 3-47E610-43-1 3-47E610-43-6 3-47E860-1 3-47E867-3	1-47E610-43-1-ISI 1-47E811-1-ISI 1-47E817-1-ISI 1-47E867-3-ISI 2-47E610-43-1-ISI 2-47E811-1-ISI 2-47E860-1-ISI 2-47E867-3-ISI 3-47E811-1-ISI 3-47E610-43-1-ISI 3-47E610-43-6-ISI 3-47E860-1-ISI 3-47E867-3-ISI
50	Raw Water Chemical Treatment System	BFN-50-7050	0-47E839-5	0-47E839-5-ISI
63	Standby Liquid Control System	BFN-50-7063	1-47E854-1 2-47E854-1 3-47E854-1	1-47E854-1-ISI 2-47E854-1-ISI 3-47E854-1-ISI
64	Primary Containment System	BFN-50-7064A BFN-50-7064D	1-47E865-1 2-47E2865-12 3-47E865-12	1-47E865-1-ISI 2-47E2865-12-ISI 3-47E865-12-ISI
67	Emergency Equipment Cooling Water System	BFN-50-7067	1-47E859-1 2-47E859-1 3-47E859-1 3-47E859-2 3-47E866-7	1-47E859-1-ISI 2-47E859-1-ISI 3-47E859-1-ISI 3-47E859-2-ISI 3-47E866-7-ISI

3.2 **Applicable Flow Diagrams, ISI Drawings, and Design Criteria** (Continued)

System No	System Name	Associated Design Criteria Document	Associated Flow Diagram	Associated ASME Section XI Code Class Boundary Drawing
68	Reactor Water Recirculation System	BFN-50-7068	1-47E817-1 2-47E817-1 3-47E817-1	1-47E817-1-ISI 2-47E817-1-ISI 3-47E817-1-ISI
69	Reactor Water Cleanup System	BFN-50-7069	1-47E810-1 2-47E810-1 3-47E810-1	1-47E810-1-ISI 2-47E810-1-ISI 3-47E810-1-ISI
70	Reactor Building Closed Cooling Water System	BFN-50-7070	1-47E822-1 2-47E822-1 3-47E822-1	1-47E822-1-ISI 2-47E822-1-ISI 3-47E822-1-ISI
71	Reactor Core Isolation Cooling System	BFN-50-7071	1-47E813-1 2-47E813-1 3-47E813-1	1-47E813-1-ISI 2-47E813-1-ISI 3-47E813-1-ISI
73	High Pressure Coolant Injection System	BFN-50-7073	1-47E812-1 2-47E812-1 3-47E812-1	1-47E812-1-ISI 2-47E812-1-ISI 3-47E812-1-ISI
74	Residual Heat Removal System	BFN-50-7074	1-47E811-1 2-47E811-1 3-47E811-1	1-47E811-1-ISI 2-47E811-1-ISI 3-47E811-1-ISI
75	Core Spray Cooling System	BFN-50-7075	1-47E814-1 2-47E814-1 3-47E814-1	1-47E814-1-ISI 2-47E814-1-ISI 3-47E814-1-ISI
77	Radwaste System	BFN-50-7077	1-47E852-1 1-47E852-2 2-47E852-1 2-47E852-2 3-47E852-1 3-47E852-2	1-47E852-1-ISI 1-47E852-2-ISI 2-47E852-1-ISI 2-47E852-2-ISI 3-47E852-1-ISI 3-47E852-2-ISI
78	Fuel Pool Cooling and Demineralizing System	BFN-50-7078	1-47E855-1 2-47E855-1 3-47E855-1	1-47E855-1-ISI 2-47E855-1-ISI 3-47E855-1-ISI
85	Control Rod Drive System	BFN-50-7085	1-47E810-1 1-47E820-2 1-47E820-6 2-47E2820-6 2-47E810-1 2-47E820-2 3-47E810-1 3-47E820-2 3-47E820-6	1-47E810-1-ISI 1-47E820-2-ISI 1-47E820-6-ISI 2-47E2820-6-ISI 2-47E810-1-ISI 2-47E820-2-ISI 3-47E810-1-ISI 3-47E820-2-ISI 3-47E820-6-ISI

3.3 Development of Component Test Requirements

The methodology used to determine test requirements components in scope of the BFN IST Program is described below.

A Each component in scope of the program was categorized in accordance with OM Code, ISTB-1300 and ISTC-1300 (NETP-116).

B The test requirements for each pump were determined in accordance with OM Code, Table ISTB-3000-1 and ISTB-3400 (NETP-116) as applicable for the pump category.

C The test requirements for each valve and pressure relief device were determined in accordance with OM Code, Table ISTC-3500-1 and ISTC 3510 (NETP-116).

D In cases where it is not practicable to perform valve testing on a quarterly frequency, an alternative test frequency is selected in accordance with the OM Code for deferring valve test frequency.

E The specific test requirements (test type and frequency) for pumps, valves, and pressure relief devices in scope of the IST Program are shown in Appendix A, Pump Test Plan, and Appendix B, Valve Test Plan. An explanation of the abbreviations used in these appendices is provided in Section 3.3 and Section 3.4.

Specific information regarding test frequency deferral and clarification of valve test methods are provided in Appendix C, Deferred Test Justifications and Appendix D, Clarification of Valve Test Methods. The Notes column of Appenedix B, Valve Test Plan provides reference to the applicable deferred test justification or clarification of valve test methods.

3.4 Description of Appendix A, Pump Test Plan

Appendix A, Pump Test Plan, provides a complete list of all pumps in scope of the IST Program along with pertinent information such as the associated test requirements and test frequency.

A description of each column heading in Appendix A, Pump Test Plan, along with the meaning of abbreviations used therein is provided below:

A Pump ID

The pump identification is a shortened version of the TVA UNID as shown in Maximo. Specifically, the pump identification is the TVA UNID with the plant designator (BFN) and leading zeros removed. Maximo is TVA's official master equipment list.

B Function

Function description of the component as shown in Maximo.

C Drawing / Coor

The applicable system flow diagram and drawing coordinate where the pump is shown. The instrument and controls diagram is listed when a flow diagram is not available.

D Group

Pump group as defined in OM Code, Subsection ISTB.

Group	
Abbreviation	**Description**
A	Pumps that are operated continuously or routinely during normal operation, cold shutdown, or refueling operations.
B	Pumps in standby systems that are not operated routinely except for testing.

3.4 Description of Appendix A, Pump Test Plan (Continued)

E Class

Identifies the Code Class (equivalent) classification of the pump as shown on the applicable ASME Section XI Code Class Boundary Drawings.

Class	
Abbreviation	**Description**
1	Code Class 1 equivalent
2	Code Class 2 equivalent
3	Code Class 3 equivalent

F Type

Type	
Abbreviation	**Description**
C-H	Centrifugal Horizontal - pump and driver are on a horizontal plane
C-V	Centrifugal Vertical - pump and driver are on a vertical plane
PD	Positive Displacement pump
VLS	Vertical Line Shaft pump - a vertically suspended pump where the pump driver and pump element are connected by a line shaft within an enclosed column

G Fixed or Var

Fixed or Var	
Abbreviation	**Description**
Fixed	Pump speed is fixed
Var	Pump speed is variable

H Actual Speed

Actual Speed	
Abbreviation	**Description**
GE600	Pump speed is greater than 600 rpm
LT600	Pump speed is less than 600 rpm

3.4 Description of Appendix A, Pump Test Plan (Continued)

I Test Req

Identifies specific pump test paramaters required to be tested.

Test Req	
Abbreviation	**Description**
dP	Pump differential pressure
Q	Pump flow
S	Pump speed
V	Pump vibration The actual number of vibration points varies from pump to pump depending on the pump design configuration. The actual pump vibration points and locations are identified in the procedures which test the pumps.

J Freq

Identifies the test frequency of the associated pump test.

Freq	
Abbreviation	**Description**
2Y	2 Year - this frequency is used for the comprehensive pump test
Q	Quarterly - this frequency is used for the Group A or Group B pump test

K Procedure

Identifies the procedure(s) used to perform the associated pump test. The procedures are listed for information only and are subject to change.

L Notes

Identifies additional pertinent information as applicable.

3.5 Description of Appendix B, Valve Test Plan

Appendix B, Valve Test Plan, provides a complete list of all valves in scope of the IST Program along with pertinent information such as the associated test requirements and test frequency.

A description of each column in Appendix B, Valve Test Plan, along with the meaning of abbreviations used therein is provided below:

A Valve ID

The valve identification is a shortened version of the TVA UNID as shown in Maximo. Specifically, the valve identification is the TVA UNID with the plant designator (BFN) and leading zeros removed. Maximo is TVA's official master equipment list.

B Function

Function description of the component as shown in Maximo.

C Drawing / Coor

The applicable system flow diagram and drawing coordinate where the valve is shown. The instrument and controls diagram is listed when a flow diagram is not available.

3.5 Description of Appendix B, Valve Test Plan (Continued)

D Cat

Valve category as defined in OM Code, Subsection ISTC

Cat	
Abbreviation	**Description**
A	Valves for which seat leakage is limited to a specific maximum amount in the closed position for fulfillment of their required function(s), as specified in ISTA-1100.
A/C	Valves which share the characteristics of both Category A and Category C valves.
B	Valves for which seat leakage in the closed position is inconsequential for fulfillment of the required function(s), as specified in ISTA-1100.
B/C	Valves which share the characteristics of both Category B and Category C valves.
C	Valves that are self-actuating in response to some system characteristic, such as pressure (relief valves) or flow direction (check valves) for fulfillment of the required function(s), as specified in ISTA- 1100.
D	Valves that are actuated by an energy source capable of only one operation, such as rupture disks or explosively actuated valves.

E Act / Pass

Designates whether the valve performs an active or passive safety function.

Act / Pass	
Abbreviation	**Description**
ACT	Valves that 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.
PASS	Valves that maintain obturator position and are not required to change obturator position to accomplish the required function(s) in shutting down a reactor to the safe shutdown condition, maintaining the safe shutdown condition, or mitigating the consequences of an accident.

3.5 Description of Appendix B, Valve Test Plan (Continued)

F Class

Identifies the Code Class (equivalent) classification of the valve as shown on the applicable ASME Section XI Code Class Boundary Drawing.

Class	
Abbreviation	**Description**
1	Code Class 1 equivalent
2	Code Class 2 equivalent
3	Code Class 3 equivalent

G Size

Nominal valve size in inches.

H Type

Type	
Abbreviation	**Description**
ANG	Angle valve
BA	Ball valve
BF	Butterfly valve
CK	Check valve
EX	Explosive valve
GA	Gate valve
GL	Globe valve
PLG	Plug valve
RD	Rupture disc
RV	Relief valve
SCK	Stop check valve
TCK	Testable check valve
TRV	Thermal relief valve
XCK	Excess flow check valve

3.5 Description of Appendix B, Valve Test Plan (Continued)

I Act

Act	
Abbreviation	**Description**
AO	Air operator
AO/SA	Air operator / self actuated valve
EXP	Explosive actuator
HO	Hydraulic actuator
M	Manual actuator
MO	Motor operator
SA	Self actuated valve
SO	Solenoid actuator

J Position - Norm

Position(s) of the valve when performing its normal operating function.

Norm	
Abbreviation	**Description**
C	Closed
LC	Locked closed
O	Open
O/C	Open / Closed
TH	Throttled

K Position - Safe

Position(s) of the valve when performing its safety related function.

Safe	
Abbreviation	**Description**
C	Closed
O	Open
O/C	Open / Closed

L Position - Fail

Fail	
Abbreviation	**Description**
C	Closed
FAI	Fail as is
N/A	No fail position (valve does not have motive power to fail)

3.5 Description of Appendix B, Valve Test Plan (Continued)

M Test Req

Identifies specific valve tests required to be performed.

Test Req	
Abbreviation	**Description**
BDC	Bi-Direction Close test. A close exercise test method for check valves that do not perform a safety function in the closed position.
BDO	Bi-Direction Open test. The open exercise test method for check valves that do not perform a safety function in the open position. This test only requires the valve to be exercised to the partially open position.
CM	Condition Monitoring test. This test type is shown for those check valves that tested in accordance with the Check Valve Condition Monitoring Program as described and controlled in 0-TI-443.
CVC	Check Valve Close exercise test. The close exercise test method for check valves that perform a safety function in the closes position. This test method verifies the obturator travels to the seat.
CVO	Check Valve Open exercise test. The open exercise test method for check valves that perform a safety function in the open position. This test method verifies the obturator travels to the full open position (e.g. disc on backstop) or position required to fulfill its safety function (e.g., passes maximum accident flow rate).
EXP	Explosive Valve test. The test method for explosively actuated valves. This test method includes review of the service life records for explosive charges, 20% sample actuation of explosive charges, and replacement of explosive charges.
FSC	Fail Safe Close test. Test method for valves that have a actuator that causes the valve to fail in the close position. This test method verifies the valve travels to the closed position upon loss of valve actuating power.
LTJ	Seat leakage test in accordance with 10CFR50, App. J. This test type is shown for containment isolation valves that are leak tested in accordance with the requirements of BFN's 10CFR50, Appendix J, Containment Leak Rate Program (0-TI-360). There are no specific IST related requirements for this test type. It is provided for reference purposes only.
LTP	Seat leakage test for reasons other than 10CFR50, App. J. Test method for those valves that have a specific leakage rate based on requirements other than 10CFR50, App. J. This test method verifies the leakage rate of the reactor coolant system pressure isolation valves is within Owner specified limits. Additional information regarding pressure isolation valves is provided in Appendix D.
MS	Manual Stroke test. Test method for manual valves. This test full stroke exercises the valve using the manual handwheel.

3.5 Description of Appendix B, Valve Test Plan (Continued)

M. Test Req (Continued)

Test Req	
Abbreviation	**Description**
NTR	No Test Required. This test designator is used for those valves in which no test is required. Typically, this test designator is applicable to Category B Passive valves which are not equipped with remote position indication.
PSC	Partial Stroke Close test. Test method for Category B Active valves which are partial stroke closed in lieu of full stroke close exercise. This test type is specifically addressed in the associated Deferred Test Justification provided in Appendix C.
RD	Rupture Disc test. Test method for rupture discs. This test method performs inspection of replacement rupture discs at the specified frequency.
RPI	Remote Position Indication test. Test method for valve that are equipped with remote position indication. This test verifies the indicating lights accurately reflect actual valve position. In most cases, this test is performed by local observation of valve travel as compared to indication lights. Other methodes include verification of a change in flow, pressure, temperature, etc. relative to valve obturator position as compared to indicating lights.
RV	Relief Valve test. Test method for relief valves. This test method verifies relief valves lift at their specified setpoint (within Owner specified criteria) and verifies other parameters as described and controlled in the Relief Valve Program (0-TI-577).
STC	Stroke Time Close test. Test method for power operated valves which perform a safety function in the closed position. This test performs a full stroke exercise from open to close and measures the stroke time closed.
STO	Stroke Time Open test. Test method for power operated valves which perform a safety function in the open position. This test performs a full stroke exercise from closed to open and measures the stroke time open.

3.5 Description of Appendix B, Valve Test Plan (Continued)

N Freq

Identifies the test frequency of the associated valve test.

Freq	
Abbreviation	**Description**
2Y	2 Year
AppJ	Frequency determined and controlled by the 10CFR50, Appendix J, Containment Leak Rate Program (0-TI-360).
CM	Frequency determined and controlled by the Check Valve Condition Monitoring Program (0-TI-443).
CSD	Cold Shutdown
EXP	Frequency assigned to the EXP test type for explosively actuated valves. EXP test type activities are required to be performed every 2 years.
NTR	Frequency assigned to the NTR test type in which no testing is required.
Q	Quarterly
RO	Refueling Outage
RV	Frequency determined and controlled by the Relief Valve Program (0-TI-577).

O Procedures

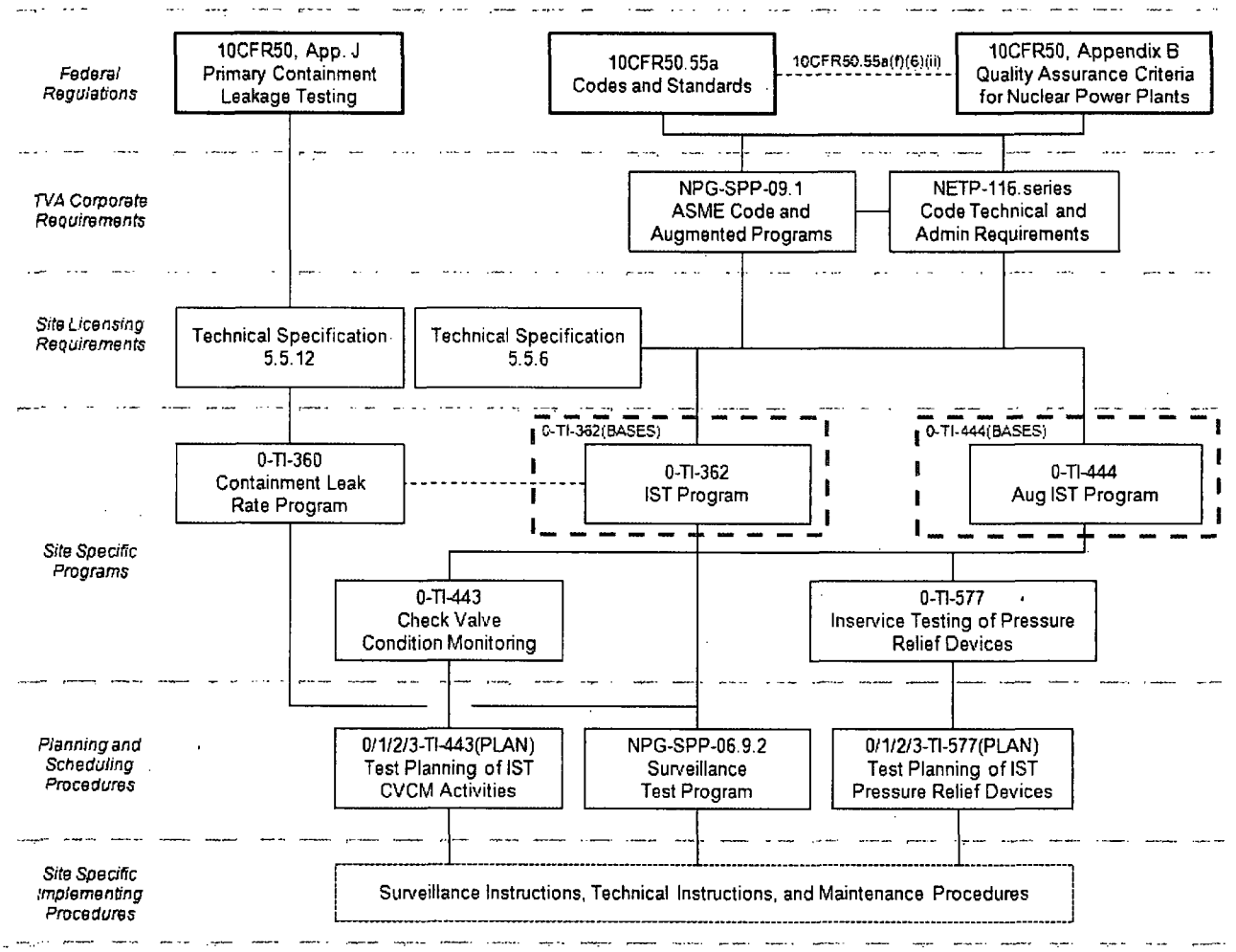
Identifies the procedure(s) used to perform the associated valve test. The procedures are listed for information only and are subject to change.

P Notes

Identifies pertinent information such as reference to the Deferred Test Justification (Appendix C) or Clarification of Valve Test Methods (Appendix D) associated with specific test or valve.

4 STRUCTURE OF INSERVICE TESTING PROGRAM REQUIREMENTS

The diagram below provides a graphic representation of the hierachy and struture of various regulations and requirements related to the BFN IST Program. The relationships depicted in this diagram are described in the following subsections.



4.1 Upper Tier Requirements for IST Program Scope and Content

10CFR50.55a requires each licensee of a boiling or pressurized water-cooled nuclear power plant to periodically update their IST Program to ensure pumps and valves which are classified as Code Class 1, 2, and 3 (equivalent) meet the test requirements of the ASME OM Code edition and addenda incorporated by reference. Section 1.5 of this procedure provides the necessary specific information. It is important to note that 10CFR50.55a restricts the scope of IST Program to included only those Class 1, 2, and 3 (equivalent) components in scope of the ASME OM Code.

TVA corporate fleet-wide procedure NPG-SPP-09.1 provides the TVA process for compliance with 10CFR50.55a.

The following TVA corporate fleet-wide procedures provide the TVA procedure equivalent of the OM Code applicable to the BFN IST Program. Content of the IST Program (e.g., test type, test frequency, pump and valve test plan tables, test deferral justifications, etc.) was developed in accordance with these procedures (OM Code).

Procedure	Description
NETP-116	Procedure eqivalent of OM Code, Subsections: ISTA - General Requirements ISTB - Pumps ISTC - Valves
NETP-116.1	This procedure addresses specific requirements in NEPT-116 (OM Code Subsections ISTB and ISTC) related to reference values and acceptance criteria. It provides the technical and administrative process for performing component evaluations and establishing new reference valves and associated acceptance criteria.
NETP-116.2	This procedure addresses specific requirements in NEPT-116 (OM Code Subsections ISTB and ISTC) related to component trending It provides the requirements for periodic component performance trending.
NETP-116.3	Provides requirements for evaluation of potential preconditioning activities affecting IST required tests.
NETP-116.4	Procedure eqivalent of OM Code, Appendix I - Pressure Relief Devices. This procedure also provides requirements for administration of the IST Pressure Relief Device Program as dicussed in Section 4.2.1 below.
NETP-116.5	Procedure eqivalent of OM Code, Appendix II - Check Valve Condition Monitoring Program. This procedure also provides requirements for administration of the IST Check Valve Condition Monitoring Program as dicussed in Section 4.2.2 below.

These procedures should be used in lieu of direct reference to OM Code where possible because they represent TVA's official position for OM Code meaning and implementation requirements. These procedures have been developed to ensure consistent interpretation and implementation of the OM Code requirements at all TVA nuclear plants.

4.2 Administration and Implementation of the IST Program

TVA fleet-wide procedures NETP-116 through NETP-116.5 provide specific processes for administration of the IST Program. This includes day-to-day activities such as:

A. Evaluation of components which have undergone maintenance and development of new reference values and acceptance criteria (NETP-116.1).

B. Performing periodic trending of component performance (NETP-116.2).

C. Performing periodic review of online and outage schedules for activities which could lead to unacceptable preconditioning (NETP-116.3)

Implementation of the BFN IST Program is accomplished by performance of site specific test procedures developed to satisfy the specific component tests identified in Appendix A and Appendix B of this procedure. These implementing procedures are also listed in the appendices where possible. Scheduling of the implementing test procedures is controlled by procedure NPG-SPP-06.9.2. Exceptions to this implementation method are described below.

The BFN IST Program is supplemented by two sub-programs: a) IST Pressure Relief Device Program; and b) Check Valve Condition Monitoring Program. This approach was taken because the valves in these sub-programs have unique test types and test frequencies based on groups of similar valves (e.g., design type, service conditions, performance history, etc) rather than an individual valve's categorization. Accordingly, Appendix B, Valve Test Plan of this procedure identifies the test type and test frequency for valves included in the sub-programs in general terms such as CM for reference to the Check Valve Condition Monitoring Program and RV for reference to the IST Pressure Relief Device Program. Additional information regarding each of these sub-programs is provided in Sections 4.2.1 and 4.2.2 below.

4.2.1 IST Pressure Relief Device Program

Technical and administrative requirements for the IST Pressure Relief Device Program are delineated in NETP-116.4.

The IST Pressure Relief Device Program is described in procedure 0-TI-577. This procedure provides a list of the valve groups, valves in each group, and the test frequency for each valve and valve group. As a matter of convenience, the IST Pressure Relief Device Program includes components in scope of both the IST Program (0-TI-362) and Augmented IST Program (0-TI-444).

Pressure relief device testing activies are spread across multiple valves and over time frames that may span multiple refueling outages. Therefore in order to ensure continuity and accountability of testing activities, procedures 0-TI-577(PLAN), 1-TI-577(PLAN), 2-TI-577(PLAN), and 3-TI-577(PLAN) have been developed. These procedures show the ten year plan for each valve group by identifying which valves will tested on an operating cycle basis. In addition, these procedures verify the testing activies are completed as required.

4.2.2 Check Valve Condition Monitoring Program

Technical and administrative requirements for the Check Valve Condition Monitoring Program are delineated in NETP-116.5.

The Check Valve Condition Monitoring Program is described in procedure 0-TI-443. This procedure provides a list of the valve groups, valves in each group, condition monitoring activites (e.g., tests, examinations) and frequency for each valve group, and reference to the evaluation prepared to substantiate the condition monitoring activities (Condition Monitoriting Plan). As a matter of convenience, the Check Valve Condition Monitoring Progam includes components in scope of both the IST Program (0-TI-362) and Augmented IST Program (0-TI-444). As described in 0-TI-443 reviews of check valve testing actitivies associated with condition monitoring should be scheduled and performed.

Condition monitoring activies are spread across multiple valves and over time frames that may span multiple refueling outages. Therefore in order to ensure continuity and accountability of condition monitoring activities, procedures 0-TI-443(PLAN), 1-TI-443(PLAN), 2-TI-443(PLAN), and 3-TI-443(PLAN) have been developed. These procedures show the ten year plan for each valve group by identifying which valves will have condition monitoring activites performed on an operating cycle basis. In addition, these procedures verify the condition monitoring activies are completed as required.

Should a required change to check valve condition monitoring activities conflict with plant technical Specifications (TS) a TS amendment must be approved in accordance with 10CFR50.55a(f)(5)(ii) prior to implementation.

4.3 Special Treatment of Technical Specification Referenced Test Frequency

The following information was added to the IST Program to address an immediate action for PER 604307.

A. The following containment isolation valves are non-code class (equivalent) and are not in scope of the IST Program. They are in scope of the Augmented IST Program (0-TI-444). These valves are associated with Technical Specification SR 3.6.1.3.5 which requires them to be stroke time tested in accordance with the frequency specified in the IST Program. The test type and test frequency for these valves are being specified in the IST Program to complete the Technical Specification reference and provide a pointer to the Augmented IST Program which provides the specific details about these valves including the associated Deferred Test Justifications. The valves listed are applicable to all three units.

Valve ID	Test Type	Test Freq
FCV-64-139	STC	Q
FCV-64-140	STC	Q
FCV-64-17	STC	RO
FCV-64-18	STC	RO
FCV-64-19	STC	RO
FCV-64-20	STC	Q
FCV-64-20	STO	Q
FCV-64-21	STC	Q
FCV-64-21	STO	Q
FCV-64-221	STC	Q
FCV-64-221	STO	Q
FCV-64-222	STC	Q
FCV-64-222	STO	Q
FCV-64-29	STC	RO
FCV-64-30	STC	RO
FCV-64-31	STC	Q
FCV-64-32	STC	RO
FCV-64-33	STC	RO
FCV-64-34	STC	Q
FCV-76-17	STC	Q

Valve ID	Test Type	Test Freq
FSV-76-49	STC	RO
FSV-76-49	STO	RO
FSV-76-50	STC	RO
FSV-76-50	STO	RO
FSV-76-55	STC	RO
FSV-76-55	STO	RO
FSV-76-56	STC	RO
FSV-76-56	STO	RO
FSV-76-57	STC	RO
FSV-76-57	STO	RO
FSV-76-58	STC	RO
FSV-76-58	STO	RO
FSV-84-48	STC	Q
FSV-84-49	STC	Q
FSV-84-8A	STC	Q
FSV-84-8A	STO	Q
FSV-84-8B	STC	Q
FSV-84-8B	STO	Q
FSV-84-8C	STC	Q
FSV-84-8C	STO	Q

4.3 Special Treatment of Technical Specification Referenced Test Frequency (Continued)

Valve ID	Test Type	Test Freq
FCV-76-18	STC	Q
FCV-76-19	STC	Q
FCV-76-24	STC	Q
FCV-84-19	STC	Q
FCV-84-20	STC	Q
FCV-94-501	STC	Q
FCV-94-502	STC	Q
FCV-94-503	STC	Q
FCV-94-504	STC	Q
FCV-94-505	STC	Q

Valve ID	Test Type	Test Freq
FSV-84-8D	STC	Q
FSV-84-8D	STO	Q
FSV-90-254A	STC	Q
FSV-90-254A	STO	Q
FSV-90-254B	STC	Q
FSV-90-254B	STO	Q
FSV-90-255	STC	Q
FSV-90-255	STO	Q
FSV-90-257A	STC	Q
FSV-90-257A	STO	Q
FSV-90-257B	STC	Q
FSV-90-257B	STO	Q

B. The following suppression chamber-to-drywell vacuum breakers are non-code class (equivalent) and are not in scope of the IST Program. They are in scope of the Augmented IST Program (0-TI-444). These vacuum breakers are associated with Technical Specification SR 3.6.1.6.2 which requires them to be functionally tested in accordance with the frequency specified in the IST Program. The test type and test frequency for these valves are being specified in the IST Program to complete the Technical Specification reference and provide a pointer to the Augmented IST Program which provides the specific details about these valves including the associated Deferred Test Justifications. The valves listed are applicable to all three units.

Valve ID	Test Type	Test Freq
FCV-64-28A	CVC	RO
FCV-64-28A	CVO	RO
FCV-64-28B	CVC	RO
FCV-64-28B	CVO	RO
FCV-64-28C	CVC	RO
FCV-64-28C	CVO	RO
FCV-64-28D	CVC	RO
FCV-64-28D	CVO	RO
FCV-64-28E	CVC	RO
FCV-64-28E	CVO	RO
FCV-64-28F	CVC	RO
FCV-64-28F	CVO	RO

Valve ID	Test Type	Test Freq
FCV-64-28G	CVC	RO
FCV-64-28G	CVO	RO
FCV-64-28H	CVC	RO
FCV-64-28H	CVO	RO
FCV-64-28J	CVC	RO
FCV-64-28J	CVO	RO
FCV-64-28K	CVC	RO
FCV-64-28K	CVO	RO
FCV-64-28L	CVC	RO
FCV-64-28L	CVO	RO
FCV-64-28M	CVC	RO
FCV-64-28E	CVO	RO

Appendix A - Pump Test plan

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
0-PMP-23-1	RHRSW PUMP A1	1-47E858-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(A1-COMP)	
								Q	2Y	0-SI-4.5.C.1(A1-COMP)	
								V	2Y	0-SI-4.5.C.1(A1-COMP)	
								dP	Q	0-SI-4.5.C.1(A1)	
								Q	Q	0-SI-4.5.C.1(A1)	
								V	Q	0-SI-4.5.C.1(A1)	
0-PMP-23-5	RHRSW PUMP A2	1-47W858-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(A2-COMP)	
								Q	2Y	0-SI-4.5.C.1(A2-COMP)	
								V	2Y	0-SI-4.5.C.1(A2-COMP)	
								dP	Q	0-SI-4.5.C.1(A2)	
								Q	Q	0-SI-4.5.C.1(A2)	
								V	Q	0-SI-4.5.C.1(A2)	
0-PMP-23-8	RHRSW PUMP C1	1-47W858-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(C1-COMP)	
								Q	2Y	0-SI-4.5.C.1(C1-COMP)	
								V	2Y	0-SI-4.5.C.1(C1-COMP)	
								dP	Q	0-SI-4.5.C.1(C1)	
								Q	Q	0-SI-4.5.C.1(C1)	
								V	Q	0-SI-4.5.C.1(C1)	

Appendix A - Pump Test plan

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
0-PMP-23-12	RHRSW PUMP C2	1-47W858-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(C2-COMP)	
								Q	2Y	0-SI-4.5.C.1(C2-COMP)	
								V	2Y	0-SI-4.5.C.1(C2-COMP)	
								dP	Q	0-SI-4.5.C.1(C2)	
								Q	Q	0-SI-4.5.C.1(C2)	
								V	Q	0-SI-4.5.C.1(C2)	
0-PMP-23-15	RHRSW PUMP B1	1-47W858-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(B1-COMP)	
								Q	2Y	0-SI-4.5.C.1(B1-COMP)	
								V	2Y	0-SI-4.5.C.1(B1-COMP)	
								dP	Q	0-SI-4.5.C.1(B1)	
								Q	Q	0-SI-4.5.C.1(B1)	
								V	Q	0-SI-4.5.C.1(B1)	
0-PMP-23-19	RHRSW PUMP B2	1-47W858-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(B2-COMP)	
								Q	2Y	0-SI-4.5.C.1(B2-COMP)	
								V	2Y	0-SI-4.5.C.1(B2-COMP)	
								dP	Q	0-SI-4.5.C.1(B2)	
								Q	Q	0-SI-4.5.C.1(B2)	
								V	Q	0-SI-4.5.C.1(B2)	

Appendix A - Pump Test plan

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
0-PMP-23-23	RHRSW PUMP D1	1-47W858-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(D1-COMP)	
								Q	2Y	0-SI-4.5.C.1(D1-COMP)	
								V	2Y	0-SI-4.5.C.1(D1-COMP)	
								dP	Q	0-SI-4.5.C.1(D1)	
								Q	Q	0-SI-4.5.C.1(D1)	
								V	Q	0-SI-4.5.C.1(D1)	
0-PMP-23-27	RHRSW PUMP D2	1-47W858-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(D2-COMP)	
								Q	2Y	0-SI-4.5.C.1(D2-COMP)	
								V	2Y	0-SI-4.5.C.1(D2-COMP)	
								dP	Q	0-SI-4.5.C.1(D2)	
								Q	Q	0-SI-4.5.C.1(D2)	
								V	Q	0-SI-4.5.C.1(D2)	
0-PMP-23-85	RHRSW PUMP A3	1-47E859-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(A3-COMP)	
								Q	2Y	0-SI-4.5.C.1(A3-COMP)	
								V	2Y	0-SI-4.5.C.1(A3-COMP)	
								dP	Q	0-SI-4.5.C.1(A3)	
								Q	Q	0-SI-4.5.C.1(A3)	
								V	Q	0-SI-4.5.C.1(A3)	

Appendix A - Pump Test plan

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
0-PMP-23-88	RHRSW PUMP B3	1-47E859-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(B3-COMP)	
								Q	2Y	0-SI-4.5.C.1(B3-COMP)	
								V	2Y	0-SI-4.5.C.1(B3-COMP)	
								dP	Q	0-SI-4.5.C.1(B3)	
								Q	Q	0-SI-4.5.C.1(B3)	
								V	Q	0-SI-4.5.C.1(B3)	
0-PMP-23-91	RHRSW PUMP C3	1-47E859-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(C3-COMP)	
								Q	2Y	0-SI-4.5.C.1(C3-COMP)	
								V	2Y	0-SI-4.5.C.1(C3-COMP)	
								dP	Q	0-SI-4.5.C.1(C3)	
								Q	Q	0-SI-4.5.C.1(C3)	
								V	Q	0-SI-4.5.C.1(C3)	
0-PMP-23-94	RHRSW PUMP D3	1-47E859-1	A	3	Vertical Line Shaft	Fixed	GE600	dP	2Y	0-SI-4.5.C.1(D3-COMP)	
								Q	2Y	0-SI-4.5.C.1(D3-COMP)	
								V	2Y	0-SI-4.5.C.1(D3-COMP)	
								dP	Q	0-SI-4.5.C.1(D3)	
								Q	Q	0-SI-4.5.C.1(D3)	
								V	Q	0-SI-4.5.C.1(D3)	

Appendix A - Pump Test plan

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
1-PMP-63-6A	SLC PUMP 1A	1-47E854-1	B	2	Positive Displacement	Fixed	LT600	P	2Y	1-SR-3.1.7.7	
								Q	2Y	1-SR-3.1.7.7	
								V	2Y	1-SR-3.1.7.7	
								P	Q		
								Q	Q	1-SI-4.4.A.1(A)	
								V	Q		
1-PMP-63-6B	SLC PUMP 1B	1-47E854-1	B	2	Positive Displacement	Fixed	LT600	P	2Y	1-SR-3.1.7.7	
								Q	2Y	1-SR-3.1.7.7	
								V	2Y	1-SR-3.1.7.7	
								P	Q		
								Q	Q	1-SI-4.4.A.1(B)	
								V	Q		
1-PMP-71-19	RCIC PUMP	1-47E813-1	B	2	Centrifugal Horizontal	Var	GE600	dP	2Y	1-SR-3.5.3.3(COMP)	
								N	2Y	1-SR-3.5.3.3(COMP)	
								Q	2Y	1-SR-3.5.3.3(COMP)	
								V	2Y	1-SR-3.5.3.3(COMP)	
								dP	Q		
								N	Q	1-SR-3.5.3.3	
								Q	Q	1-SR-3.5.3.3	
								V	Q		

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
1-PMP-73-54	HPCI TURBINE MAIN PUMP	1-47E812-1	B	2	Centrifugal Horizontal	Var	GE600	dP	2Y	1-SR-3.5.1.7(COMP)	
								N	2Y	1-SR-3.5.1.7(COMP)	
								Q	2Y	1-SR-3.5.1.7(COMP)	
								V	2Y	1-SR-3.5.1.7(COMP)	
								dP	Q		
								N	Q	1-SR-3.5.1.7	
								Q	Q	1-SR-3.5.1.7	
								V	Q		
1-PMP-74-5	RHR PUMP 1A	1-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	1-SR-3.5.1.6(RHR I-COMP)	
								Q	2Y	1-SR-3.5.1.6(RHR I-COMP)	
								V	2Y	1-SR-3.5.1.6(RHR I-COMP)	
								dP	Q	1-SR-3.5.1.6(RHR I)	
								Q	Q	1-SR-3.5.1.6(RHR I)	
								V	Q	1-SR-3.5.1.6(RHR I)	
1-PMP-74-16	RHR PUMP 1C	1-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	1-SR-3.5.1.6(RHR I-COMP)	
								Q	2Y	1-SR-3.5.1.6(RHR I-COMP)	
								V	2Y	1-SR-3.5.1.6(RHR I-COMP)	
								dP	Q	1-SR-3.5.1.6(RHR I)	
								Q	Q	1-SR-3.5.1.6(RHR I)	
								V	Q	1-SR-3.5.1.6(RHR I)	

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
1-PMP-74-28	RHR PUMP 1B	1-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	1-SR-3.5.1.6(RHR II-COMP)	
								Q	2Y	1-SR-3.5.1.6(RHR II-COMP)	
								V	2Y	1-SR-3.5.1.6(RHR II-COMP)	
								dP	Q	1-SR-3.5.1.6(RHR II)	
								Q	Q	1-SR-3.5.1.6(RHR II)	
								V	Q	1-SR-3.5.1.6(RHR II)	
1-PMP-74-39	RHR PUMP 1D	1-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	1-SR-3.5.1.6(RHR II-COMP)	
								Q	2Y	1-SR-3.5.1.6(RHR II-COMP)	
								V	2Y	1-SR-3.5.1.6(RHR II-COMP)	
								dP	Q	1-SR-3.5.1.6(RHR II)	
								Q	Q	1-SR-3.5.1.6(RHR II)	
								V	Q	1-SR-3.5.1.6(RHR II)	
1-PMP-75-5	CORE SPRAY PUMP 1A	1-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	1-SR-3.5.1.6(CS I-COMP)	
								Q	2Y	1-SR-3.5.1.6(CS I-COMP)	
								V	2Y	1-SR-3.5.1.6(CS I-COMP)	
								dP	Q		
								Q	Q	1-SR-3.5.1.6(CS I)	
								V	Q		

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
1-PMP-75-14	CORE SPRAY PUMP 1C	1-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	1-SR-3.5.1.6(CS I-COMP)	
								Q	2Y	1-SR-3.5.1.6(CS I-COMP)	
								V	2Y	1-SR-3.5.1.6(CS I-COMP)	
								dP	Q		
								Q	Q	1-SR-3.5.1.6(CS I)	
								V	Q		
1-PMP-75-33	CORE SPRAY PUMP 1B	1-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	1-SR-3.5.1.6(CS II-COMP)	
								Q	2Y	1-SR-3.5.1.6(CS II-COMP)	
								V	2Y	1-SR-3.5.1.6(CS II-COMP)	
								dP	Q		
								Q	Q	1-SR-3.5.1.6(CS II)	
								V	Q		
1-PMP-75-42	CORE SPRAY PUMP 1D	1-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	1-SR-3.5.1.6(CS II-COMP)	
								Q	2Y	1-SR-3.5.1.6(CS II-COMP)	
								V	2Y	1-SR-3.5.1.6(CS II-COMP)	
								dP	Q		
								Q	Q	1-SR-3.5.1.6(CS II)	
								V	Q		

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
2-PMP-63-6A	SLC PUMP 2A	2-47E854-1	B	2	Positive Displacement	Fixed	LT600	P	2Y	2-SI-4.4.A.1(A)	
								Q	2Y	2-SR-3.1.7.7	
								V	2Y	2-SR-3.1.7.7	
								P	Q		
								Q	Q	2-SI-4.4.A.1	
								V	Q		
2-PMP-63-6B	SLC PUMP 2B	2-47E854-1	B	2	Positive Displacement	Fixed	LT600	P	2Y	2-SR-3.1.7.7	
								Q	2Y	2-SR-3.1.7.7	
								V	2Y	2-SR-3.1.7.7	
								P	Q		
								Q	Q	2-SI-4.4.A.1(B)	
								V	Q		
2-PMP-71-19	RCIC PUMP	2-47E813-1	B	2	Centrifugal Horizontal	Var	GE600	dP	2Y	2-SR-3.5.3.3(COMP)	
								N	2Y	2-SR-3.5.3.3(COMP)	
								Q	2Y	2-SR-3.5.3.3(COMP)	
								V	2Y	2-SR-3.5.3.3(COMP)	
								dP	Q		
								N	Q	2-SR-3.5.3.3	
								Q	Q	2-SR-3.5.3.3	
								V	Q		

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
2-PMP-73-54	HPCI TURBINE MAIN PUMP	2-47E812-1	B	2	Centrifugal Horizontal	Var	GE600	dP	2Y	2-SR-3.5.1.7(COMP)	
								N	2Y	2-SR-3.5.1.7(COMP)	
								Q	2Y	2-SR-3.5.1.7(COMP)	
								V	2Y	2-SR-3.5.1.7(COMP)	
								dP	Q		
								N	Q	2-SR-3.5.1.7	
								Q	Q	2-SR-3.5.1.7	
								V	Q		
2-PMP-74-5	RHR PUMP 2A	2-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	2-SR-3.5.1.6(RHR I-COMP)	
								Q	2Y	2-SR-3.5.1.6(RHR I-COMP)	
								V	2Y	2-SR-3.5.1.6(RHR I-COMP)	
								dP	Q	2-SR-3.5.1.6(RHR I)	
								Q	Q	2-SR-3.5.1.6(RHR I)	
								V	Q	2-SR-3.5.1.6(RHR I)	
2-PMP-74-16	RHR PUMP 2C	2-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	2-SR-3.5.1.6(RHR I-COMP)	
								Q	2Y	2-SR-3.5.1.6(RHR I-COMP)	
								V	2Y	2-SR-3.5.1.6(RHR I-COMP)	
								dP	Q	2-SR-3.5.1.6(RHR I)	
								Q	Q	2-SR-3.5.1.6(RHR I)	
								V	Q	2-SR-3.5.1.6(RHR I)	

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
2-PMP-74-28	RHR PUMP 2B	2-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	2-SR-3.5.1.6(RHR II-COMP)	
								Q	2Y	2-SR-3.5.1.6(RHR II-COMP)	
								V	2Y	2-SR-3.5.1.6(RHR II-COMP)	
								dP	Q	2-SR-3.5.1.6(RHR II)	
								Q	Q	2-SR-3.5.1.6(RHR II)	
								V	Q	2-SR-3.5.1.6(RHR II)	
2-PMP-74-39	RHR PUMP 2D	2-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	2-SR-3.5.1.6(RHR II-COMP)	
								Q	2Y	2-SR-3.5.1.6(RHR II-COMP)	
								V	2Y	2-SR-3.5.1.6(RHR II-COMP)	
								dP	Q	2-SR-3.5.1.6(RHR II)	
								Q	Q	2-SR-3.5.1.6(RHR II)	
								V	Q	2-SR-3.5.1.6(RHR II)	
2-PMP-75-5	CORE SPRAY PUMP 2A	2-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	2-SR-3.5.1.6(CS I-COMP)	
								Q	2Y	2-SR-3.5.1.6(CS I-COMP)	
								V	2Y	2-SR-3.5.1.6(CS I-COMP)	
								dP	Q		
								Q	Q	2-SR-3.5.1.6(CS I)	
								V	Q		

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
2-PMP-75-14	CORE SPRAY PUMP 2C	2-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	2-SR-3.5.1.6(CS I-COMP)	
								Q	2Y	2-SR-3.5.1.6(CS I-COMP)	
								V	2Y	2-SR-3.5.1.6(CS I-COMP)	
								dP	Q		
								Q	Q	2-SR-3.5.1.6(CS I)	
								V	Q		
2-PMP-75-33	CORE SPRAY PUMP 2B	2-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	2-SR-3.5.1.6(CS II-COMP)	
								Q	2Y	2-SR-3.5.1.6(CS II-COMP)	
								V	2Y	2-SR-3.5.1.6(CS II-COMP)	
								dP	Q		
								Q	Q	2-SR-3.5.1.6(CS II)	
								V	Q		
2-PMP-75-42	CORE SPRAY PUMP 2D	2-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	2-SR-3.5.1.6(CS II-COMP)	
								Q	2Y	2-SR-3.5.1.6(CS II-COMP)	
								V	2Y	2-SR-3.5.1.6(CS II-COMP)	
								dP	Q		
								Q	Q	2-SR-3.5.1.6(CS II)	
								V	Q		

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
3-PMP-63-6A	SLC PUMP 3A	3-47E854-1	B	2	Positive Displacement	Fixed	LT600	P	2Y	3-SR-3.1.7.7	
								Q	2Y	3-SR-3.1.7.7	
								V	2Y	3-SR-3.1.7.7	
								P	Q		
								Q	Q	3-SI-4.4.A.1	
								V	Q		
3-PMP-63-6B	SLC PUMP 3B	3-47E854-1	B	2	Positive Displacement	Fixed	LT600	P	2Y	3-SR-3.1.7.7	
								Q	2Y	3-SR-3.1.7.7	
								V	2Y	3-SR-3.1.7.7	
								P	Q		
								Q	Q	3-SI-4.4.A.1(B)	
								V	Q		
3-PMP-71-19	RCIC PUMP	3-47E813-1	B	2	Centrifugal Horizontal	Var	GE600	dP	2Y	3-SR-3.5.3.3(COMP)	
								N	2Y	3-SR-3.5.3.3(COMP)	
								Q	2Y	3-SR-3.5.3.3(COMP)	
								V	2Y	3-SR-3.5.3.3(COMP)	
								dP	Q		
								N	Q	3-SR-3.5.3.3	
								Q	Q	3-SR-3.5.3.3	
								V	Q		

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
3-PMP-73-54	HPCI TURBINE MAIN PUMP	3-47E812-1	B	2	Centrifugal Horizontal	Var	GE600	dP	2Y	3-SR-3.5.1.7(COMP)	
								N	2Y	3-SR-3.5.1.7(COMP)	
								Q	2Y	3-SR-3.5.1.7(COMP)	
								V	2Y	3-SR-3.5.1.7(COMP)	
								dP	Q		
								N	Q	3-SR-3.5.1.7	
								Q	Q	3-SR-3.5.1.7	
								V	Q		
3-PMP-74-5	RHR PUMP 3A	3-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	3-SR-3.5.1.6(RHR I-COMP)	
								Q	2Y	3-SR-3.5.1.6(RHR I-COMP)	
								V	2Y	3-SR-3.5.1.6(RHR I-COMP)	
								dP	Q	3-SR-3.5.1.6(RHR I)	
								Q	Q	3-SR-3.5.1.6(RHR I)	
								V	Q	3-SR-3.5.1.6(RHR I)	
3-PMP-74-16	RHR PUMP 3C	3-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	3-SR-3.5.1.6(RHR I-COMP)	
								Q	2Y	3-SR-3.5.1.6(RHR I-COMP)	
								V	2Y	3-SR-3.5.1.6(RHR I-COMP)	
								dP	Q	3-SR-3.5.1.6(RHR I)	
								Q	Q	3-SR-3.5.1.6(RHR I)	
								V	Q	3-SR-3.5.1.6(RHR I)	

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
3-PMP-74-28	RHR PUMP 3B	3-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	3-SR-3.5.1.6(RHR II-COMP)	
								Q	2Y	3-SR-3.5.1.6(RHR II-COMP)	
								V	2Y	3-SR-3.5.1.6(RHR II-COMP)	
								dP	Q	3-SR-3.5.1.6(RHR II)	
								Q	Q	3-SR-3.5.1.6(RHR II)	
								V	Q	3-SR-3.5.1.6(RHR II)	
3-PMP-74-39	RHR PUMP 3D	3-47E811-1	A	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	3-SR-3.5.1.6(RHR II-COMP)	
								Q	2Y	3-SR-3.5.1.6(RHR II-COMP)	
								V	2Y	3-SR-3.5.1.6(RHR II-COMP)	
								dP	Q	3-SR-3.5.1.6(RHR II)	
								Q	Q	3-SR-3.5.1.6(RHR II)	
								V	Q	3-SR-3.5.1.6(RHR II)	
3-PMP-75-5	CORE SPRAY PUMP 3A	3-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	3-SR-3.5.1.6(CS I-COMP) 3-SR-3.5.1.6(CS I)	
								Q	2Y	3-SR-3.5.1.6(CS I-COMP)	
								V	2Y	3-SR-3.5.1.6(CS I-COMP) 3-SR-3.5.1.6(CS I)	
								dP	Q		
								Q	Q	3-SR-3.5.1.6(CS I)	
								V	Q		

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PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
3-PMP-75-14	CORE SPRAY PUMP 3C	3-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	3-SR-3.5.1.6(CS I-COMP) 3-SR-3.5.1.6(CS I)	
								Q	2Y	3-SR-3.5.1.6(CS I-COMP)	
								V	2Y	3-SR-3.5.1.6(CS I-COMP) 3-SR-3.5.1.6(CS I)	
								dP	Q		
								Q	Q	3-SR-3.5.1.6(CS I)	
								V	Q		
3-PMP-75-33	CORE SPRAY PUMP 3B	3-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	3-SR-3.5.1.6(CS II-COMP) 3-SR-3.5.1.6(CS II)	
								Q	2Y	3-SR-3.5.1.6(CS II-COMP)	
								V	2Y	3-SR-3.5.1.6(CS II-COMP) 3-SR-3.5.1.6(CS II)	
								dP	Q		
								Q	Q	3-SR-3.5.1.6(CS II)	
								V	Q		
3-PMP-75-42	CORE SPRAY PUMP 3D	3-47E814-1	B	2	Centrifugal Vertical	Fixed	GE600	dP	2Y	3-SR-3.5.1.6(CS II-COMP) 3-SR-3.5.1.6(CS II)	
								Q	2Y	3-SR-3.5.1.6(CS II-COMP)	
								V	2Y	3-SR-3.5.1.6(CS II-COMP) 3-SR-3.5.1.6(CS II)	
								dP	Q		
								Q	Q	3-SR-3.5.1.6(CS II)	
								V	Q		

Appendix B - Valve Test Plan

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
0-CKV-23-502	RHRSW A1 PMP DISCH CKV	1-47E858-1 / B-5	C	ACT	3	18	CK	SA	C	O/C	N/A	CVC CVO	Q Q	0-SI-4.5.C.1(A2) 0-SI-4.5.C.1(A2-COMP) 0-SI-4.5.C.1(A1) 0-SI-4.5.C.1(A1-COMP)	
0-SHV-23-504	RHRSW A1-A2 PMP XTIE	1-47E858-1 / C-5	B	PASS	3	18	GA	M	O/C	O/C	N/A	NTR	NTR		
0-CKV-23-506	RHRSW A2 PMP DISCH CKV	1-47E858-1 / B-5	C	ACT	3	18	CK	SA	C	O/C	N/A	CVC CVO	Q Q	0-SI-4.5.C.1(A1) 0-SI-4.5.C.1(A1-COMP) 0-SI-4.5.C.1(A2) 0-SI-4.5.C.1(A2-COMP)	
0-CKV-23-522	RHRSW B1 PMP DISCH CKV	1-47E858-1 / B-4	C	ACT	3	18	CK	SA	C	O/C	N/A	CVC CVO	Q Q	0-SI-4.5.C.1(B2) 0-SI-4.5.C.1(B2-COMP) 0-SI-4.5.C.1(B1) 0-SI-4.5.C.1(B1-COMP)	
0-SHV-23-524	RHRSW B1-B2 PMP XTIE	1-47E858-1 / B-4	B	PASS	3	18	GA	M	O/C	O/C	N/A	NTR	NTR		
0-CKV-23-526	RHRSW B2 PMP DISCH CKV	1-47E858-1 / B-4	C	ACT	3	18	CK	SA	C	O/C	N/A	CVC CVO	Q Q	0-SI-4.5.C.1(B1) 0-SI-4.5.C.1(B1-COMP) 0-SI-4.5.C.1(B2) 0-SI-4.5.C.1(B2-COMP)	
0-SHV-23-528	RHRSW BAY A CHEMICAL INJECTION HEADER 1 SOV	1-47E858-1 / C-5	B	PASS	3	1	BA	M	C	C	N/A	NTR	NTR		
0-SHV-23-539	RHRSW BAY A CHEMICAL INJECTION HEADER 2 SOV	1-47E858-1 / B-5	B	PASS	3	1	BA	M	C	C	N/A	NTR	NTR		
0-CKV-23-542	RHRSW C2 PMP DISCH CKV	1-47E858-1 / B-4	C	ACT	3	18	CK	SA	C	O/C	N/A	CVC CVO	Q Q	0-SI-4.5.C.1(C1) 0-SI-4.5.C.1(C1-COMP) 0-SI-4.5.C.1(C2) 0-SI-4.5.C.1(C2-COMP)	
0-SHV-23-544	RHRSW C1-C2 PMP XTIE	1-47E858-1 / B-3	B	PASS	3	18	GA	M	O/C	O/C	N/A	NTR	NTR		
0-CKV-23-546	RHRSW C1 PMP DISCH CKV	1-47E858-1 / B-3	C	ACT	3	18	CK	SA	C	O/C	N/A	CVC CVO	Q Q	0-SI-4.5.C.1(C2) 0-SI-4.5.C.1(C2-COMP) 0-SI-4.5.C.1(C1) 0-SI-4.5.C.1(C1-COMP)	
0-SHV-23-548	RHRSW BAY B CHEMICAL INJECTION HEADER 1 SOV	1-47E858-1 / C-4	B	PASS	3	1	BA	M	C	C	N/A	NTR	NTR		
0-SHV-23-558	RHRSW BAY B CHEMICAL INJECTION HEADER 2 SOV	1-47E858-1 / C-4	B	PASS	3	1	BA	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
0-CKV-23-561	RHRSW D2 PMP DISCH CKV	1-47E858-1 / B-3	C	ACT	3	18	CK	SA	C	O/C	N/A	CVC CVO	Q Q	0-SI-4.5.C.1(D1) 0-SI-4.5.C.1(D1-COMP) 0-SI-4.5.C.1(D2) 0-SI-4.5.C.1(D2-COMP)	
0-SHV-23-563	RHRSW D1-D2 PMP XTIE	1-47E858-1 / B-3	B	PASS	3	18	GA	M	O/C	O/C	N/A	NTR	NTR		
0-CKV-23-565	RHRSW D1 PMP DISCH CKV	1-47E858-1 / B-3	C	ACT	3	18	CK	SA	C	O/C	N/A	CVC CVO	Q Q	0-SI-4.5.C.1(D2) 0-SI-4.5.C.1(D2-COMP) 0-SI-4.5.C.1(D1) 0-SI-4.5.C.1(D1-COMP)	
0-SHV-23-567	RHRSW BAY C CHEMICAL INJECTION HEADER 1 SOV	1-47E858-1 / C-3	B	PASS	3	1	BA	M	C	C	N/A	NTR	NTR		
0-SHV-23-577	RHRSW BAY C CHEMICAL INJECTION HEADER 2 SOV	1-47E858-1 / B-3	B	PASS	3	1	BA	M	C	C	N/A	NTR	NTR		
0-CKV-23-588	RHRSW A3 PMP DISCH CKV	1-47E858-1 / B-5	C	ACT	3	14	CK	SA	C	O/C	N/A	CM	CM	0-SI-4.5.C.1(A3) 0-SI-4.5.C.1(A3-COMP)	
0-CKV-23-591	RHRSW B3 PMP DISCH CKV	1-47E858-1 / B-4	C	ACT	3	14	CK	SA	C	O/C	N/A	CM	CM	0-SI-4.5.C.1(B3) 0-SI-4.5.C.1(B3-COMP)	
0-CKV-23-594	RHRSW C3 PMP DISCH CKV	1-47E858-1 / B-3	C	ACT	3	14	CK	SA	C	O/C	N/A	CM	CM	0-SI-4.5.C.1(C3) 0-SI-4.5.C.1(C3-COMP)	
0-CKV-23-597	RHRSW D3 PMP DISCH CKV	1-47E858-1 / B-2	C	ACT	3	14	CK	SA	C	O/C	N/A	CM	CM	0-SI-4.5.C.1(D3) 0-SI-4.5.C.1(D3-COMP)	
0-SHV-23-599	RHRSW BAY D CHEMICAL INJECTION HEADER 1 SOV	1-47E858-1 / C-3	B	PASS	3	1	BA	M	C	C	N/A	NTR	NTR		
0-SHV-23-600	RHRSW BAY D CHEMICAL INJECTION HEADER 2 SOV	1-47E858-1 / B-3	B	PASS	3	1	BA	M	C	C	N/A	NTR	NTR		
0-CKV-23-601	RHRSW HDR C KP FILL	1-47E858-1 / E-4	C	ACT	3	1.5	CK	SA	O	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.31	
0-CKV-23-603	RHRSW HDR A KP FILL	1-47E858-1 / E-4	C	ACT	3	1.5	CK	SA	O	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.31	
0-CKV-23-605	RHRSW HDR B KP FILL	1-47E858-1 / E-3	C	ACT	3	1.5	CK	SA	O	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.31	
0-CKV-23-607	RHRSW HDR D KP FILL	1-47E858-1 / E-3	C	ACT	3	1.5	CK	SA	O	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.31	
0-SHV-50-783	EECW STNR A CHEMICAL INL INJECTION HDR 1 SOV	0-47E839-5 / G-6	B	PASS	3	1	PLG	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
0-SHV-50-784	EECW STNR A CHEMICAL OUTL INJECTION HDR 1 SOV	0-47E839-5 / G-6	B	PASS	3	1	PLG	M	C	C	N/A	NTR	NTR		
0-SHV-50-785	EECW STNR B CHEMICAL INL INJECTION HDR 1 SOV	0-47E839-5 / G5	B	PASS	3	1	PLG	M	C	C	N/A	NTR	NTR		
0-SHV-50-786	EECW STNR B CHEMICAL OUTL INJECTION HDR 1 SOV	0-47E839-5 / G-5	B	PASS	3	1	PLG	M	C	C	N/A	NTR	NTR		
0-SHV-50-787	EECW STNR C CHEMICAL INL INJECTION HDR 1 SOV	0-47E839-5 / G-4	B	PASS	3	1	PLG	M	C	C	N/A	NTR	NTR		
0-SHV-50-788	EECW STNR C CHEMICAL OUTL INJECTION HDR 1 SOV	0-47E839-5 / G-4	B	PASS	3	1	PLG	M	C	C	N/A	NTR	NTR		
0-SHV-50-789	EECW STNR D CHEMICAL INL INJECTION HDR 1 SOV	0-47E839-5 / G-3	B	PASS	3	1	PLG	M	C	C	N/A	NTR	NTR		
0-SHV-50-790	EECW STNR D CHEMICAL OUTL INJECTION HDR 1 SOV	0-47E839-5 / G-3	B	PASS	3	1	PLG	M	C	C	N/A	NTR	NTR		
0-FCV-67-1	EECW HDR A STR BKWSH	1-47E859-1 / A-5	B	ACT	3	1.25	BA	MO	O/C	O/C	FAI	RPI STC STO	2Y Q Q	0-SI-4.5.C.1(A3-COMP) 0-SI-4.5.C.1(A3) 0-SI-4.5.C.1(A3-COMP) 0-SI-4.5.C.1(A3) 0-SI-4.5.C.1(A3-COMP)	
0-FCV-67-5	EECW HDR B STR BKWSH	1-47E859-1 / B-5	B	ACT	3	1.25	BA	MO	O/C	O/C	FAI	RPI STC STO	2Y Q Q	0-SI-4.5.C.1(B3-COMP) 0-SI-4.5.C.1(B3) 0-SI-4.5.C.1(B3-COMP) 0-SI-4.5.C.1(B3) 0-SI-4.5.C.1(B3-COMP)	
0-FCV-67-8	EECW HDR C STR BKWSH	1-47E859-1 / D-2	B	ACT	3	1.25	BA	MO	O/C	O/C	FAI	RPI STC STO	2Y Q Q	0-SI-4.5.C.1(C3-COMP) 0-SI-4.5.C.1(C3) 0-SI-4.5.C.1(C3-COMP) 0-SI-4.5.C.1(C3) 0-SI-4.5.C.1(C3-COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
0-FCV-67-11	EECW HDR D STR BKWSH	1-47E859-1 / C-2	B	ACT	3	1.25	BA	MO	O/C	O/C	FAI	RPI STC STO	2Y Q Q	0-SI-4.5.C.1(D3-COMP) 0-SI-4.5.C.1(D3) 0-SI-4.5.C.1(D3-COMP) 0-SI-4.5.C.1(D3) 0-SI-4.5.C.1(D3-COMP)	
0-FCV-67-48	EECW/RHRSW XTIE	1-47E859-1 / B-3	B	PASS	3	14	BF	MO	C	O/C	FAI	RPI	2Y	0-SI-3.2.10.C	
0-FCV-67-49	EECW/RHRSW XTIE	1-47E859-1 / B-3	B	PASS	3	14	BF	MO	C	O/C	FAI	RPI	2Y	0-SI-3.2.10.C	
0-FCV-67-53	EECW N HDR TO AIR CMPSR	1-47E859-1 / G-6	B	ACT	3	4	BF	AO	O/C	C	C	RPI FSC STC	2Y Q Q	0-SI-3.2.10.C 0-SI-4.5.C.1(1) 0-SI-4.5.C.1(1)	
0-SHV-67-88	EECW/RHRSW XTIE	1-47E859-1 / B-4	B	PASS	3	14	BF	M	O/C	O/C	N/A	NTR	NTR		
0-SHV-67-89	EECW/RHRSW XTIE	1-47E859-1 / B-4	B	PASS	3	14	BF	M	O/C	O/C	N/A	NTR	NTR		
0-CKV-67-502	SOUTH HDR CKV	1-47E859-1 / B-8	C	ACT	3	18	CK	SA	O/C	O/C	N/A	CM	CM	0-SI-4.5.C.1(B3) 0-SI-4.5.C.1(B3-COMP)	
0-CKV-67-507	1D DG CLR S HDR CKV	1-47E859-1 / C-7	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG D)	
0-CKV-67-508	1D DG CLR S HDR CKV	1-47E859-1 / C-8	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG D)	
0-CKV-67-514	1C DG CLR S HDR CKV	1-47E859-1 / D-7	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG C)	
0-CKV-67-515	1C DG CLR S HDR CKV	1-47E859-1 / D-8	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG C)	
0-CKV-67-521	1B DG CLR S HDR CKV	1-47E859-1 / F-7	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG B)	
0-CKV-67-522	1B DG CLR S HDR CKV	1-47E859-1 / F-8	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG B)	
0-CKV-67-528	1A DG CLR S HDR CKV	1-47E859-1 / G-7	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG A)	
0-CKV-67-529	1A DG CLR S HDR CKV	1-47E859-1 / G-8	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG A)	
0-CKV-67-619	SOUTH HDR CKV	1-47E859-1 / C-1	C	ACT	3	18	CK	SA	O/C	O/C	N/A	CM	CM	0-SI-4.5.C.1(D3) 0-SI-4.5.C.1(D3-COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
0-CKV-67-622	NORTH HDR CKV	1-47E859-1 / E-8	C	ACT	3	18	CK	SA	O/C	O/C	N/A	CM	CM	0-SI-4.5.C.1(A3) 0-SI-4.5.C.1(A3) 0-SI-4.5.C.1(A3-COMP)	
0-CKV-67-624	1C DG CLR N HDR CKV	1-47E859-1 / D-7	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG C)	
0-CKV-67-625	1C DG CLR N HDR CKV	1-47E859-1 / D-8	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG C)	
0-CKV-67-627	1D DG CLR N HDR CKV	1-47E859-1 / C-7	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG D)	
0-CKV-67-628	1D DG CLR N HDR CKV	1-47E859-1 / C-8	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG D)	
0-CKV-67-630	1B DG CLR N HDR CKV	1-47E859-1 / F-7	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG B)	
0-CKV-67-631	1B DG CLR N HDR CKV	1-47E859-1 / F-8	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG B)	
0-CKV-67-634	1A DG CLR N HDR CKV	1-47E859-1 / G-7	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG A)	
0-CKV-67-635	1A DG CLR N HDR CKV	1-47E859-1 / G-8	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 0-SI-3.2.4(DG A)	
0-CKV-67-671	NORTH HDR CKV	1-47E859-1 / E-1	C	ACT	3	18	CK	SA	O/C	O/C	N/A	CM	CM	0-SI-4.5.C.1(C3) 0-SI-4.5.C.1(C3-COMP)	
0-SHV-67-680	SOUTH HDR RSW CHARGE SPLY	1-47E859-1 / C-5	B	PASS	3	1	GL	M	C	C	N/A	NTR	NTR		
0-SHV-67-683	NORTH HDR RCW CHARGE SPLY VLV	1-47E859-1 / G-2	B	PASS	3	1	GL	M	C	C	N/A	NTR	NTR		
0-SHV-67-786	NORTH HDR SPLY TO EMER CHILLER	1-47E859-1 / G-7	B	PASS	3	6	GA	M	C	C	N/A	NTR	NTR		
0-SHV-67-788	SOUTH HDR SPLY TO EMER CHILLER	1-47E859-1 / G-7	B	PASS	3	6	GA	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-PCV-1-4	MS LN A RLF	1-47E801-1 / B-3	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV
1-PCV-1-5	MS LN A RLF	1-47E801-1 / B-5	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV : ADS
1-ECKV-1-13FEA	EXCESS FLOW CKV TO 1-FT-001-0013 (X-34A)	1-47E801-1 / A-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-ECKV-1-13FEB	EXCESS FLOW CKV TO 1-FT-001-0013 (X-30A)	1-47E801-1 / A-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-FCV-1-14	MS LN A INBD ISOL	1-47E801-1 / B-6	A	ACT	1	26	GL	AO	O	C	C	RPI LTJ STC PSC FSC	2Y AppJ CSD Q RO	1-SR-3.3.3.1.4(MSIV) 1-SR-3.6.1.3.6 1-SR-3.6.1.3.10(A) 1-GOI-100-12A 1-SR-3.6.1.3.6 1-SR-3.3.1.1.8(5) 1-SI-3.2.12(INBD)	 DTJ-4 DTJ-4
1-FCV-1-15	MS LN A OUTBD ISOL	1-47E801-1 / B-7	A	ACT	1	26	GL	AO	O	C	C	RPI LTJ FSC STC PSC	2Y AppJ CSD CSD Q	1-SR-3.3.3.1.4(MSIV) 1-SR-3.6.1.3.6 1-SR-3.6.1.3.10(A) 1-SI-3.2.12(OUTBD) 1-GOI-100-12A 1-SR-3.6.1.3.6 1-SR-3.3.1.1.8(5)	 DTJ-4 DTJ-4
1-PCV-1-18	MS LN B RLF	1-47E801-1 / C-1	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV
1-PCV-1-19	MS LN B RLF	1-47E801-1 / C-2	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV : ADS

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-PCV-1-22	MS LN B RLF	1-47E801-1 / C-3	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV : ADS
1-PCV-1-23	MS LN B RLF	1-47E801-1 / C-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV
1-ECKV-1-25FEA	EXCESS FLOW CKV TO 1-FT-001-0025 (X-34B)	1-47E801-1 / A-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-ECKV-1-25FEB	EXCESS FLOW CKV TO 1-FT-001-0025 (X-30B)	1-47E801-1 / A-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-FCV-1-26	MS LN B INBD ISOL	1-47E801-1 / C-6	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(MSIV) 1-SR-3.6.1.3.6	
												LTJ	AppJ	1-SR-3.6.1.3.10(B INBD)	
												STC	CSD	1-GOI-100-12A 1-SR-3.6.1.3.6	DTJ-4
												PSC	Q	1-SR-3.3.1.1.8(5)	
												FSC	RO	1-SI-3.2.12(INBD)	DTJ-4
1-FCV-1-27	MS LN B OUTBD ISOL	1-47E801-1 / C-7	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(MSIV) 1-SR-3.6.1.3.6	
												LTJ	AppJ	1-SR-3.6.1.3.10(B OUTBD)	
												FSC	CSD	1-SI-3.2.12(OUTBD)	DTJ-4
												STC	CSD	1-GOI-100-12A 1-SR-3.6.1.3.6	DTJ-4
												PSC	Q	1-SR-3.3.1.1.8(5)	
1-PCV-1-30	MS LN C RLF	1-47E801-1 / E-1	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV : ADS
1-PCV-1-31	MS LN C RLF	1-47E801-1 / E-2	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-PCV-1-34	MS LN C RLF	1-47E801-1 / E-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV : ADS
1-ECKV-1-36FEA	EXCESS FLOW CKV TO 1-FT-001-0036 (X-34C)	1-47E801-1 / G-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-ECKV-1-36FEB	EXCESS FLOW CKV TO 1-FT-001-0036 (X-30C)	1-47E801-1 / G-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-FCV-1-37	MS LN C INBD ISOL	1-47E801-1 / E-6	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(MSIV) 1-SR-3.6.1.3.6	
												LTJ	AppJ	1-SR-3.6.1.3.10(C)	
												STC	CSD	1-GOI-100-12A 1-SR-3.6.1.3.6	DTJ-4
												PSC	Q	1-SR-3.3.1.1.8(5)	
												FSC	RO	1-SI-3.2.12(INBD)	DTJ-4
1-FCV-1-38	MS LN C OUTBD ISOL	1-47E801-1 / E-7	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(MSIV) 1-SR-3.6.1.3.6	
												LTJ	AppJ	1-SR-3.6.1.3.10(C OUTBD)	
												FSC	CSD	1-SI-3.2.12(OUTBD)	DTJ-4
												STC	CSD	1-GOI-100-12A	DTJ-4
												PSC	Q	1-SR-3.6.1.3.6 1-SR-3.3.1.1.8(5)	
1-PCV-1-41	MS LN D RLF	1-47E801-1 / F-3	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV
1-PCV-1-42	MS LN D RLF	1-47E801-1 / F-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV
1-ECKV-1-50FEA	EXCESS FLOW CKV TO 1-FT-001-0050 (X-34D)	1-47E801-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-ECKV-1-50FEB	EXCESS FLOW CKV TO 1-FT-001-0050 (X-30D)	1-47E801-1 / G-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-1-51	MS LN D INBD ISOL	1-47E801-1 / F-6	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(MSIV) 1-SR-3.6.1.3.6	
												LTJ	AppJ	1-SR-3.6.1.3.10(D)	
												STC	CSD	1-GOI-100-12A	DTJ-4
												PSC	Q	1-SR-3.6.1.3.6 1-SR-3.3.1.1.8(5)	
												FSC	RO	1-SI-3.2.12(INBD)	DTJ-4
1-FCV-1-52	MS LN D OUTBD ISOL	1-47E801-1 / E-7	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(MSIV) 1-SR-3.6.1.3.6	
												LTJ	AppJ	1-SR-3.6.1.3.10(D OUTBD)	
												FSC	CSD	1-SI-3.2.12(OUTBD)	DTJ-4
												STC	CSD	1-GOI-100-12A	DTJ-4
												PSC	Q	1-SR-3.6.1.3.6 1-SR-3.3.1.1.8(5)	
1-FCV-1-55	MS DRN LN INBD ISOL	1-47E801-1 / D-6	A	ACT	1	3	GA	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/1e	
												STC	Q	1-SR-3.6.1.3.5(MS)	
1-FCV-1-56	MS DRN LN OUTBD ISOL	1-47E801-1 / D-7	A	ACT	1	3	GA	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/1e	
												STC	Q	1-SR-3.6.1.3.5(MS)	
1-FCV-1-57	MS DRN TO COND ISOL	1-47E801-1 / D-9	B	PASS	2	3	GL	MO	O	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
1-FCV-1-58	MS DRN TO COND ISOL	1-47E801-1 / D-9	B	ACT	2	3	GL	MO	C	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
												STO	Q	1-SR-3.6.1.3.5(MS)	
1-FCV-1-59	MS DRN TO COND ISOL	1-47E801-1 / D-11	B	ACT	2	4	GA	MO	C	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
												STO	Q	1-SR-3.6.1.3.5(MS)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-1-127	RFPT 1A HP STOP VLV	1-47E801-2 / J-2	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(C)	
												FSC	Q	1-SI-3.2.29	
												STC	Q	1-SI-3.2.29	
1-FCV-1-135	RFPT 1B HP STOP VLV	1-47E801-2 / J-4	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(C)	
												FSC	Q	1-SI-3.2.29	
												STC	Q	1-SI-3.2.29	
1-FCV-1-143	RFPT 1C HP STOP VLV	1-47E801-2 / J-5	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(C)	
												FSC	Q	1-SI-3.2.29	
												STC	Q	1-SI-3.2.29	
1-FCV-1-145	STM SEAL BYPASS ISOL	1-47E807-2 / H-4	B	ACT	2	4	GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(B)	
												STC	CSD	1-SI-3.2.30	DTJ-12
1-PCV-1-147	MS STM SEAL ISOL	1-47E807-2 / G-4	B	ACT	2	4	ANG	AO	TH	C	C	RPI	2Y	1-SR-3.3.3.1.4(B)	
												FSC	CSD	1-SI-3.2.30	DTJ-11
												STC	CSD	1-SI-3.2.30	DTJ-11
1-PCV-1-151	SJAE 1A STG 1/2 REG	1-47E801-2 / J-7	B	ACT	2	1	GL	AO	O/C	C	C	RPI	2Y	1-SR-3.3.3.1.4(B)	
												FSC	CSD	1-SI-3.2.30	DTJ-8
												STC	CSD	1-SI-3.2.30	DTJ-8
1-PCV-1-153	SJAE 1B STG 1/2 REG	1-47E801-2 / H-9	B	ACT	2	1	GL	AO	O/C	C	C	RPI	2Y	1-SR-3.3.3.1.4(B)	
												FSC	CSD	1-SI-3.2.30	DTJ-8
												STC	CSD	1-SI-3.2.30	DTJ-8
1-FCV-1-154	AUX STM TO STM SEAL ISOL	1-47E807-2 / G-4	B	PASS	2	4	GA	MO	C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(B)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-PCV-1-166	SJAE 1A STG 3 REG	1-47E801-2 / I-7	B	ACT	2	1	GL	AO	O/C	C	C	RPI	2Y	1-SR-3.3.3.1.4(B)	
												FSC	CSD	1-SI-3.2.30	DTJ-8
												STC	CSD	1-SI-3.2.30	DTJ-8
1-PCV-1-167	SJAE 1A STG 3 REG	1-47E801-2 / G-9	B	ACT	2	1	GL	AO	O/C	C	C	RPI	2Y	1-SR-3.3.3.1.4(B)	
												FSC	CSD	1-SI-3.2.30	DTJ-8
												STC	CSD	1-SI-3.2.30	DTJ-8
1-FCV-1-168	MS LN A DRN ISOL	1-47E801-1 / C-9	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
												STO	CSD	1-SI-3.2.32	DTJ-9
1-FCV-1-169	MS LN B DRN ISOL	1-47E801-1 / C-9	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
												STO	CSD	1-SI-3.2.32	DTJ-9
1-FCV-1-170	MS LN C DRN ISOL	1-47E801-1 / E-9	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
												STO	CSD	1-SI-3.2.32	DTJ-9
1-FCV-1-171	MS LN D DRN ISOL	1-47E801-1 / F-9	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(A)	
												STO	CSD	1-SI-3.2.32	DTJ-9
1-PCV-1-179	MS LN A RLF	1-47E801-1 / B-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV
1-PCV-1-180	MS LN D RLF	1-47E801-1 / E-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	1-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 1-SR-3.4.3.2	MSRV
1-CKV-1-742	OG PREHTR 1A SPLY	1-47E801-2 / G-11	C	ACT	2	0.75	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3	
1-CKV-1-744	OG PREHTR 1B SPLY	1-47E801-2 / H-11	C	ACT	2	0.75	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3	

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									NORM	SAFE	FAIL				
1-CKV-3-554	FDWTR LN A OUTBD ISOL	1-47E803-1 / G-6	A/C	ACT	1	24	CK	SA	O	C	N/A	LTJ	AppJ	1-SI-4.7.A.2.g-3/3a	
												BDO	RO	1-SI-3.2.31	DTJ-1
												CVC	RO	1-SI-4.7.A.2.g-3/3a	DTJ-1
1-CKV-3-558	FDWTR LN A INBD ISOL	1-47E803-1 / G-7	A/C	ACT	1	24	CK	SA	O	O/C	N/A	LTJ	AppJ	1-SI-4.7.A.2.g-3/3a	
												CVC	RO	1-SI-4.7.A.2.g-3/3a	DTJ-1
												CVO	RO	1-SI-3.2.31	DTJ-1
1-CKV-3-568	FDWTR LN B OUTBD ISOL	1-47E803-1 / F-6	A/C	ACT	1	24	CK	SA	O	C	N/A	LTJ	AppJ	1-SI-4.7.A.2.g-3/3b	
												BDO	RO	1-SI-3.2.31	DTJ-1
												CVC	RO	1-SI-4.7.A.2.g-3/3b	DTJ-1
1-CKV-3-572	FDWTR LN B INBD ISOL	1-47E803-1 / F-6	A/C	ACT	1	24	CK	SA	O	O/C	N/A	LTJ	AppJ	1-SI-4.7.A.2.g-3/3b	
												CVC	RO	1-SI-4.7.A.2.g-3/3b	DTJ-1
												CVO	RO	1-SI-3.2.31	DTJ-1
1-ECKV-3-816	EXCESS FLOW CKV NEAR PENE (28D)	1-47E803-5 / D-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-ECKV-3-817	EXCESS FLOW CKV NEAR PENE (28A)	1-47E803-5 / D-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-ECKV-3-818	EXCESS FLOW CKV NEAR PENE (29D)	1-47E803-5 / C-9	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3) 1-SR-3.6.1.3.8(4)	
1-ECKV-3-819	EXCESS FLOW CKV NEAR PENE (29A)	1-47E803-5 / B-9	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	
1-ECKV-3-829	EXCESS FLOW CKV NEAR PENE (28C)	1-47E803-5 / E-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-ECKV-3-830	EXCESS FLOW CKV NEAR PENE (28B)	1-47E803-5 / F-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-ECKV-3-833	EXCESS FLOW CKV NEAR PENE (29B)	1-47E803-5 / C-9	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	
1-ECKV-3-835	EXCESS FLOW CKV NEAR PENE (28E)	1-47E803-5 / G-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-ECKV-3-836	EXCESS FLOW CKV NEAR PENE (29C)	1-47E803-5 / C-9	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-ECKV-3-837	EXCESS FLOW CKV NEAR PENE (28F)	1-47E803-5 / G-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.8(6)	
1-ECKV-3-838	EXCESS FLOW CKV NEAR PENE (28B)	1-47E803-5 / F-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-FCV-6-100	TSV #1 DRN ISOL	1-47E807-1 / C-1	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(B)	
												STC	Q	1-SI-3.2.35	
1-FCV-6-101	TSV #2 DRN ISOL	1-47E807-1 / D-1	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(B)	
												STC	Q	1-SI-3.2.35	
1-FCV-6-102	TSV #3 DRN ISOL	1-47E807-1 / E-1	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(B)	
												STC	Q	1-SI-3.2.35	
1-FCV-6-103	TSV #4 DRN ISOL	1-47E807-1 / F-1	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(B)	
												STC	Q	1-SI-3.2.35	
1-FCV-6-122	RFPT 1A STOP VLV DRN	1-47E807-2 / B-4	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(C)	
												STC	Q	1-SI-3.2.35	
1-FCV-6-127	RFPT 1B STOP VLV DRN	1-47E807-2 / B-7	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(C)	
												STC	Q	1-SI-3.2.35	
1-FCV-6-132	RFPT 1C STOP VLV DRN	1-47E807-2 / B-11	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(C)	
												STC	Q	1-SI-3.2.35	
1-FCV-6-153	RFPT 1A STOP VLV DRN	1-47E807-2 / B-5	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(C)	, , ,
												STC	Q	1-SI-3.2.35	,
1-FCV-6-155	RFPT 1B STOP VLV DRN	1-47E807-2 / B-8	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(C)	, , ,
												STC	Q	1-SI-3.2.35	,
1-FCV-6-157	RFPT 1C STOP VLV DRN	1-47E807-2 / B-11	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(C)	, , ,
												STC	Q	1-SI-3.2.35	,

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-CKV-6-822	SJAE 1B COND DRN	1-47E805-3 / G-7	C	ACT	2	0.5	CK	SA	O	C	N/A	CM	CM	1-SI-3.2.3	
1-CKV-6-826	SJAE 1A COND DRN	1-47E805-3 / G-6	C	ACT	2	0.5	CK	SA	O	C	N/A	CM	CM	1-SI-3.2.3	
1-CKV-10-506	MSRV TL PIPE A VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-507	MSRV TL PIPE B VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-508	MSRV TL PIPE C VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-509	MSRV TL PIPE D VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-510	MSRV TL PIPE E VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-511	MSRV TL PIPE F VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-512	MSRV TL PIPE G VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-513	MSRV TL PIPE H VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-514	MSRV TL PIPE J VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-515	MSRV TL PIPE K VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-516	MSRV TL PIPE L VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-519	MSRV TL PIPE M VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-520	MSRV TL PIPE N VC RLF	1-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-521	MSRV TL PIPE A VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-522	MSRV TL PIPE B VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-523	MSRV TL PIPE C VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-524	MSRV TL PIPE D VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-525	MSRV TL PIPE E VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-CKV-10-526	MSRV TL PIPE F VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-527	MSRV TL PIPE G VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-528	MSRV TL PIPE H VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-529	MSRV TL PIPE J VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-530	MSRV TL PIPE K VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-531	MSRV TL PIPE L VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-532	MSRV TL PIPE M VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-CKV-10-533	MSRV TL PIPE N VC RLF	1-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.11	
1-SHV-12-623	STM TO RCIC DR TRAP OUTL SHUTOFF VLV	1-47E815-3 / C-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-BYV-12-625	STM TO RCIC DR TRAP BYPASS VLV	1-47E815-3 / C-7	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-SHV-12-635	STM INL TO U1 HPCI TRAP OUTL SHUTOFF VLV	1-47E815-3 / B-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-BYV-12-637	STM INL TO U1 HPCI TRAP BYPASS VLV	1-47E815-3 / B-7	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-SHV-12-824	WASHDOWN STM DR TRAP DISCH SHUTOFF VLV	0-47E815-1 / G-1	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-FCV-23-34	RHR HTX A OUTLT	1-47E858-1 / F-8	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	1-SI-3.2.10.B 1-SI-4.5.C.1(A) 1-SI-4.5.C.1(A)	
1-FCV-23-40	RHR HTX C OUTLT	1-47E858-1 / H-8	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	1-SI-3.2.10.B 1-SI-4.5.C.1(C) 1-SI-4.5.C.1(C)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-23-46	RHR HTX B OUTLT	1-47E858-1 / F-5	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI	2Y	1-SI-3.2.10.B	
												STC	Q	1-SI-4.5.C.1(B)	
												STO	Q	1-SI-4.5.C.1(B)	
1-FCV-23-52	RHR HTX D OUTLT	1-47E858-1 / H-5	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI	2Y	1-SI-3.2.10.B	
												STC	Q	1-SI-4.5.C.1(D)	
												STO	Q	1-SI-4.5.C.1(D)	
1-FCV-23-57	STANDBY COOLANT ISOL	1-47E858-1 / G-5	B	PASS	3	10	GA	MO	C	C	FAI	RPI	2Y	1-SI-3.2.10.B	
1-RFV-23-509	RHR HTX A SPLY RLF	1-47E858-1 / E-7	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-23-510	RHR HTX A INLT CKV	1-47E858-1 / E-7	C	ACT	3	16	CK	SA	C	O	N/A	BDC	Q	1-SI-4.5.C.1(A)	
												CVO	Q	1-SI-4.5.C.1(A)	
1-SHV-23-512	RHR HTX 1A DEMIN WATER INLET	1-47E858-1 / E-7	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
1-RFV-23-516	RHR HTX A TUBE RLF	1-47E858-1 / F-7	C	ACT	3	1	TRV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-23-529	RHR HTX B SPLY RLF	1-47E858-1 / E-5	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-23-530	RHR HTX B INLT CKV	1-47E858-1 / E-5	C	ACT	3	16	CK	SA	C	O	N/A	BDC	Q	1-SI-4.5.C.1(B)	
												CVO	Q	1-SI-4.5.C.1(B)	
1-SHV-23-532	RHR HTX 1B DEMIN WATER INLET	1-47E858-1 / E-6	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
1-RFV-23-536	RHR HTX B TUBE RLF	1-47E858-1 / F-6	C	ACT	3	1	TRV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-23-549	RHR HTX C SPLY RLF	1-47E858-1 / E-8	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-23-550	RHR HTX C INLT CKV	1-47E858-1 / E-8	C	ACT	3	16	CK	SA	C	O	N/A	BDC	Q	1-SI-4.5.C.1(C)	
												CVO	Q	1-SI-4.5.C.1(C)	
1-SHV-23-552	RHR HTX 1C DEMIN WATER INLET	1-47E858-1 / E-8	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-RFV-23-555	RHR HTX C TUBE RLF	1-47E858-1 / H-6	C	ACT	3	1	TRV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-23-568	RHR HTX D SPLY RLF	1-47E858-1 / E-5	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-23-569	RHR HTX D INLT CKV	1-47E858-1 / E-5	C	ACT	3	16	CK	SA	C	O	N/A	BDC	Q	1-SI-4.5.C.1(D)	
												CVO	Q	1-SI-4.5.C.1(D)	
1-SHV-23-571	RHR HTX 1D DEMIN WATER INLET	1-47E858-1 / E-5	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
1-RFV-23-574	RHR HTX D TUBE RLF	1-47E858-1 / H-6	C	ACT	3	1	TRV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-FCV-43-13	RECIRC CNTMT ISOL	1-47E817-1 / D-7	A	ACT	2	0.75	GL	AO	O/C	C	C	RPI	2Y	1-SR-3.3.3.1.4(L)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/43a	
												FSC	Q	1-SR-3.6.1.3.5(43)	
												STC	Q	1-SR-3.6.1.3.5(43)	
1-FCV-43-14	RECIRC CNTMT ISOL	1-47E817-1 / D-8	A	ACT	2	0.75	GL	AO	O/C	C	C	RPI	2Y	1-SR-3.3.3.1.4(L)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/43a	
												FSC	Q	1-SR-3.6.1.3.5(43)	
												STC	Q	1-SR-3.6.1.3.5(43)	
1-FSV-43-50	PASS CNTMT ISOL	1-47E867-3 / G-2	B	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	1-SR-3.3.3.1.4(L)	
												FSC	Q	1-SR-3.6.1.3.5(43)	
												STC	Q	1-SR-3.6.1.3.5(43)	
1-FSV-43-56	PASS CNTMT ISOL	1-47E867-3 / G-3	B	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	1-SR-3.3.3.1.4(L)	
												FSC	Q	1-SR-3.6.1.3.5(43)	
												STC	Q	1-SR-3.6.1.3.5(43)	
1-SMV-43-622	RHR HTX A DISCH GRAB	1-47E610-43-1 / F-1	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
1-SMV-43-623	RHR HTX B DISCH GRAB	1-47E610-43-1 / F-1	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-SMV-43-624	RHR HTX C DISCH GRAB	1-47E610-43-1 / F-1	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
1-SMV-43-625	RHR HTX D DISCH GRAB	1-47E610-43-1 / F-1	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
1-SHV-43-631	MAN-43-15 SAMPLE INLET	1-47E610-43-1 / F-12	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-SHV-43-631A	SAMPLE BOMB FOR NON-CONDENSIBLES	1-47E610-43-1 / F-12	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-SHV-43-632	MS BEFORE SV GRAB	1-47E610-43-1 / F-12	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-FCV-63-8A	SLC PMP A INJ	1-47E854-1 / F-6	D	ACT	2	1.5	EX	EXP	C	O	N/A	EXP	EXP	1-SR-3.1.7.7	
1-FCV-63-8B	SLC PMP B INJ	1-47E854-1 / E-6	D	ACT	2	1.5	EX	EXP	C	O	N/A	EXP	EXP	1-SR-3.1.7.7	
1-SHV-63-502	DEMIN WTR TO SLC SUCTION LINE SHUTOFF VLV	1-47E854-1 / F-2	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-SHV-63-509	DEMIN WTR TO A PUMP SUCTION SHUTOFF VLV	1-47E854-1 / D-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-SHV-63-511	DEMIN WTR TO B PUMP SUCTION SHUTOFF VLV	1-47E854-1 / D-5	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-RFV-63-512	SLC PMP A RLF	1-47E854-1 / E-5	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-63-513	SLC PMP B RLF	1-47E854-1 / E-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-63-514	SLC PMP A DISCH CKV	1-47E854-1 / E-5	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-4.4.A.1(A) 1-SR-3.1.7.7	
1-CKV-63-516	SLC PMP B DISCH CKV	1-47E854-1 / E-4	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.1.7.7	
1-CKV-63-525	SLC CNTMT ISOL	1-47E854-1 / E-7	C	ACT	1	1.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.1.7.7	
1-CKV-63-526	SLC CNTMT ISOL	1-47E854-1 / D-7	C	ACT	1	1.5	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.1.7.7	
1-SCV-64-678	SUPPR CHMBR LEVEL SVC CONN FOR 1-LE-64-66	1-47E865-1 / A-3	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
1-SCV-64-682	SUPPR CHMBR LEVEL SVC CONN FOR 1-LE-64-54	1-47E865-1 / A-5	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-67-50	EECW N HDR TO RBCCW HTX	1-47E859-1 / E-5	B	ACT	3	8	BF	AO	O/C	C	C	RPI FSC STC	2Y Q Q	1-SI-3.2.10.C 0-SI-4.5.C.1(1) 0-SI-4.5.C.1(1)	
1-FCV-67-51	EECW S HDR TO RBCCW HTX	1-47E859-1 / C-5	B	ACT	3	8	BF	AO	O/C	C	C	RPI FSC STC	2Y Q Q	1-SI-3.2.10.C 0-SI-4.5.C.1(1) 0-SI-4.5.C.1(1)	
1-CKV-67-541	CS I RM CLR S HDR SPLY	1-47E859-1 / F-7	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(CS I)	
1-CKV-67-542	CS I RM CLR S HDR SPLY	1-47E859-1 / F-7	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(CS I)	
1-CKV-67-558	RHR I RM CLR S HDR SPLY	1-47E859-1 / C-6	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(RHR I)	
1-CKV-67-559	RHR I RM CLR S HDR SPLY	1-47E859-1 / C-6	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(RHR I)	
1-CKV-67-584	CS II RM CLR S HDR SPLY	1-47E859-1 / F-5	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(CS II)	
1-CKV-67-585	CS II RM CLR S HDR SPLY	1-47E859-1 / F-5	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(CS II)	
1-CKV-67-600	RHR II RM CLR S HDR SPLY	1-47E859-1 / C-4	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(RHR II)	
1-CKV-67-601	RHR II RM CLR S HDR SPLY	1-47E859-1 / C-4	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(RHR II)	
1-CKV-67-638	RHR I RM CLR N HDR SPLY	1-47E859-1 / F-6	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(RHR I)	
1-CKV-67-639	RHR I RM CLR N HDR SPLY	1-47E859-1 / C-6	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(RHR I)	
1-CKV-67-648	CS I RM CLR N HDR SPLY	1-47E859-1 / F-6	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(CS I)	
1-CKV-67-649	CS I RM CLR N HDR SPLY	1-47E859-1 / F-6	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(CS I)	
1-CKV-67-656	CS II RM CLR N HDR SPLY	1-47E859-1 / F-4	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(CS II)	
1-CKV-67-657	CS II RM CLR N HDR SPLY	1-47E859-1 / F-4	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(CS II)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-CKV-67-659	RHR II RM CLR N HDR SPLY	1-47E859-1 / F-4	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(RHR II)	
1-CKV-67-660	RHR II RM CLR N HDR SPLY	1-47E859-1 / C-4	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.4(RHR II)	
1-SHV-67-792	N EECW TO FP ISOL	1-47E859-1 / C-3	B	PASS	3	3	GA	M	C	C	N/A	NTR	NTR		
1-SHV-67-793	SOUTH HDR SPLY TO EMER FUEL POOL MU	1-47E859-1 / C-4	B	PASS	3	3	GA	M	C	C	N/A	NTR	NTR		
1-FCV-68-3	RECIRC PMP A DISCH	1-47E817-1 / D-6	B	ACT	1	28	GA	MO	O	C	FAI	RPI STC	2Y CSD	1-SI-3.2.10.D	 DTJ-5
1-ECKV-68-5A	EXSV FL CKV FOR FT-68-5A	1-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-5B	EXSV FL CKV FOR FT-68-5B	1-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-7A	EXSV FL CKV FOR 1-FT-68-7A	1-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-7B	EXSV FL CKV FOR 1-FT-68-7B	1-47E817-1 / C-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	
1-ECKV-68-7BA	EXSV FL CKV FOR 1-FT-68-7A/7B	1-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-8	EXSV FL CKV FOR 1-FT-68-8	1-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-10	EXSV FL CKV FOR 1-FT-68-10	1-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-11	EXSV FL CKV FOR 1-FT-68-11	1-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-13	EXSV FL CKV FOR 1-FT-68-13	1-47E817-1 / A-5	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-15A	EXSV FL CKV FOR 1-FT-68-15A	1-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-15BA	EXSV FL CKV FOR 1-FT-68-15B	1-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-15BB	EXSV FL CKV FOR 1-FT-68-15B	1-47E817-1 / D-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-ECKV-68-18	EXSV FL CKV FOR 1-FT-68-18	1-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-19	EXSV FL CKV FOR 1-FT-68-19	1-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-ECKV-68-21	EXSV FL CKV FOR 1-FT-68-21	1-47E817-1 / A-5	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-22	EXSV FL CKV FOR 1-FT-68-22	1-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-25A	EXSV FL CKV FOR 1-FT-68-25A	1-47E817-1 / A-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-ECKV-68-25B	EXSV FL CKV FOR 1-FT-68-25B	1-47E817-1 / A-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-26	EXSV FL CKV FOR 1-FT-68-26	1-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-28	EXSV FL CKV FOR 1-FT-68-28	1-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-29	EXSV FL CKV FOR 1-FT-68-29	1-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-30	EXSV FL CKV FOR 1-FT-68-30	1-47E817-1 / A-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-38A	EXSV FL CKV FOR 1-FT-68-38A	1-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	
1-ECKV-68-38B	EXSV FL CKV FOR 1-FT-68-38B	1-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-39	EXSV FL CKV FOR 1-FT-68-39	1-47E817-1 / A-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-40	EXSV FL CKV FOR 1-FT-68-40	1-47E817-1 / A-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-42	EXSV FL CKV FOR 1-FT-68-42	1-47E817-1 / A-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-43	EXSV FL CKV FOR 1-FT-68-43	1-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-52	EXSV FL CKV FOR 1-PDT-68-52	1-47E817-1 / C-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-ECKV-68-63	EXSV FL CKV FOR 1-PT-68-63	1-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-64	EXSV FL CKV FOR 1-PT-68-64	1-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-65A	EXCESS FLOW CKV FOR 1-PDT-68-65	1-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-65B	EXCESS FLOW CKV FOR 1-PDT-68-65	1-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-75	EXSV FL CKV FOR 1-PT-68-75	1-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-ECKV-68-76	EXSV FL CKV FOR 1-PT-68-76	1-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-FCV-68-79	RECIRC PMP B DISCH	1-47E817-1 / C-4	B	ACT	1	28	GA	MO	O	C	FAI	RPI STC	2Y CSD	1-SI-3.2.10.D	 DTJ-5
1-ECKV-68-81A	EXCS FL CKV FOR FT-68-81A	1-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-81B	EXCS FL CKV FOR FT-68-81B	1-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-82A	EXCESS FLOW CKV FOR 1-PDT-68-82	1-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-82B	EXCESS FLOW CKV FOR 1-PDT-68-82	1-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
1-ECKV-68-93	EXSV FL CKV FOR 1-PT-68-93	1-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	
1-ECKV-68-94	EXSV FL CKV FOR 1-PT-68-94	1-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-CKV-68-508	RECIRC PMP SEAL ISOL	1-47E817-1 / A-6	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ CM	AppJ CM	1-SI-4.7.A.2.g-3/68a 1-SI-3.2.3 1-SI-3.2.31 1-SI-4.7.A.2.g-3/68a	
1-CKV-68-523	RECIRC PMP SEAL ISOL	1-47E817-1 / A-4	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ CM	AppJ CM	1-SI-4.7.A.2.g-3/68b 1-SI-3.2.3 1-SI-3.2.31 1-SI-4.7.A.2.g-3/68b	
1-CKV-68-550	RECIRC PMP SEAL ISOL	1-47E817-1 / A-7	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ CM	AppJ CM	1-SI-4.7.A.2.g-3/68a 1-SI-3.2.3 1-SI-3.2.31 1-SI-4.7.A.2.g-3/68a	
1-CKV-68-555	RECIRC PMP SEAL ISOL	1-47E817-1 / A-3	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ CM	AppJ CM	1-SI-4.7.A.2.g-3/68b 1-SI-3.2.3 1-SI-3.2.31 1-SI-4.7.A.2.g-3/68b	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-69-1	RWCU INBD CNTMT ISOL	1-47E810-1 / G-7	A	ACT	1	6	GA	MO	O	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(E)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/69	
												STC	Q	1-SR-3.6.1.3.5(RWCU)	
1-FCV-69-2	RWCU OUTBD CNTMT ISOL	1-47E810-1 / G-6	A	ACT	1	6	GA	MO	O	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(E)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/69	
												STC	Q	1-SR-3.6.1.3.5(RWCU)	
1-CKV-69-629	RWCU TO FDWTR ISOL	1-47E810-1 / E-7	A/C	ACT	1	4	CK	SA	O	C	N/A	LTJ	AppJ	1-SI-4.7.A.2.g-3/3b	
												CM	CM	1-SI-3.2.3 1-SI-3.2.31 1-SI-4.7.A.2.g-3/3b	
1-FCV-70-47	RBCCW RTN CNTMT ISOL	1-47E822-1 / G-2	A	ACT	2	8	GA	MO	O	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(N)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/70	
												STC	RO	1-SR-3.6.1.3.5(RBCCW)	DTJ-6
1-CKV-70-506	RBCCW SPLY CNTMT ISOL	1-47E822-1 / G-2	A/C	ACT	2	8	CK	SA	O	C	N/A	LTJ	AppJ	1-SI-4.7.A.2.g-3/70	
												CM	CM	1-SI-3.2.3 1-SI-3.2.31 1-SI-4.7.A.2.g-3/70	
1-ECKV-71-1AA	EXCESS FLOW CHECK VALVE TO PDIS-71-1A LOW SIDE	1-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	
1-ECKV-71-1AB	EXCESS FLOW CHECK VALVE TO PDIS-71-1A HIGH SIDE	1-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	
1-ECKV-71-1BA	EXCESS FLOW CHECK VALVE TO PDIS-71-1B LOW SIDE	1-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	
1-ECKV-71-1BB	EXCESS FLOW CHECK VALVE TO PDIS-71-1B HIGH SIDE	1-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(4)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-71-2	RCIC STM LN INBD CNTMT ISOL	1-47E813-1 / G-7	A	ACT	1	3	GA	MO	O	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(F)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/71a	
												STC	Q	1-SR-3.6.1.3.5(RCIC)	
												STO	Q	1-SR-3.6.1.3.5(RCIC)	
1-FCV-71-3	RCIC STM LN OUTBD CNTMT ISOL	1-47E813-1 / G-6	A	ACT	1	3	GA	MO	O	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(F)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/71a	
												STC	Q	1-SR-3.6.1.3.5(RCIC)	
												STO	Q	1-SR-3.6.1.3.5(RCIC)	
1-FCV-71-6A	RCIC STM LN TO COND DRN	1-47E813-1 / E-1	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		
1-FCV-71-6B	RCIC STM LN TO COND DRN	1-47E813-1 / E-1	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		
1-FCV-71-8	RCIC TRB STM SPLY	1-47E813-1 / F-1	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(F)	
												STC	Q	1-SR-3.6.1.3.5(RCIC)	
												STO	Q	1-SR-3.6.1.3.5(RCIC)	
1-RPD-71-11A	RCIC TRB EXH RPD	1-47E813-1 / E-3	D	ACT	2	8	RD	SA	C	O/C	N/A	RD	RV	1-SI-3.2.19	
1-SHV-71-14	RCIC TRB EXH VLV	1-47E813-1 / D-7	A/C	ACT	2	8	SCK	SA	C	O/C	N/A	LTJ	AppJ	1-SI-4.7.A.2.g-3/71b	
												CM	CM	1-SI-3.2.3 1-SR-3.5.3.3 1-SR-3.5.3.3(COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-71-17	PSC TO RCIC INBD ISOL	1-47E813-1 / B-6	B	ACT	2	6	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	1-SR-3.3.3.1.4(F)	
1-FCV-71-18	PSC TO RCIC OUTBD ISOL	1-47E813-1 / G-4	B	ACT	2	6	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	1-SR-3.3.3.1.4(F)	
1-RFV-71-19	RCIC PMP SUCT RLF	1-47E813-1 / G-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-FCV-71-25	RCIC LUBE OIL CLG WTR	1-47E813-1 / B-4	B	ACT	2	2	GL	MO	O	O/C	FAI	RPI STC STO	2Y Q Q	1-SR-3.3.3.1.4(F) 1-SR-3.6.1.3.5(RCIC) 1-SR-3.6.1.3.5(RCIC)	
1-SHV-71-32	RCIC COND VC PMP DISCH	1-47E813-1 / D-7	C	ACT	2	2	SCK	SA	O	C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(RCIC CM)	
1-FCV-71-34	RCIC PMP MIN FLOW	1-47E813-1 / E-5	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	1-SR-3.3.3.1.4(F) 1-SR-3.6.1.3.5(RCIC) 1-SR-3.6.1.3.5(RCIC)	
1-FCV-71-37	RCIC INJ OUTBD ISOL	1-47E813-1 / F-5	B	PASS	2	6	GA	MO	O	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(F)	
1-FCV-71-38	RCIC PMP TEST RTN TO CST	1-47E813-1 / G-5	B	ACT	2	4	GL	MO	O/C	C	FAI	RPI STC	2Y Q	1-SR-3.3.3.1.4(F) 1-SR-3.6.1.3.5(RCIC)	
1-FCV-71-39	RCIC INJ INBD ISOL	1-47E813-1 / F-6	B	ACT	2	6	GA	MO	O/C	O	FAI	RPI STO	2Y Q	1-SR-3.3.3.1.4(F) 1-SR-3.6.1.3.5(RCIC)	
1-FCV-71-40	RCIC TESTABLE CKV	1-47E813-1 / F-6	A/C	ACT	1	6	TCK	SA	C	O/C	N/A	RPI LTJ CM	2Y AppJ CM	1-SR-3.6.1.3.5(RCIC RO)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-71-59	RCIC TURB EXH VAC RELIEF FLOW CONT VALVE	1-47E813-1 / D-8	B	PASS	2	3	GA	MO	O	O	FAI	NTR	NTR		
1-CKV-71-499	CST TO RCIC PMP INLT	1-47E813-1 / G-4	C	ACT	2	6	CK	SA	O/C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.3.3 1-SR-3.5.3.3(COMP)	
1-CKV-71-508	PSC TO RCIC PMP INLT	1-47E813-1 / B-6	C	ACT	2	6	CK	SA	C	O	N/A	CM	CM	1-SI-3.2.3	
1-RFV-71-543	RCIC COND CLG WTR	1-47E813-1 / B-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-71-547	RCIC PMP MIN FLOW	1-47E813-1 / E-5	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.3.3 1-SR-3.5.3.3(COMP) 1-SR-3.6.1.3.5(RCIC CM)	
1-SHV-71-565	RCIC TURB AUX STM SUPPLY SHUTOFF VALVE	1-47E813-1 / H-2	B	PASS	2	3	GA	M	C	C	N/A	NTR	NTR		
1-CKV-71-580	RCIC TRB EXH CKV	1-47E813-1 / E-7	A/C	ACT	2	10	CK	SA	C	O/C	N/A	LTJ CM	AppJ CM	1-SI-4.7.A.2.g-3/71b 1-SI-3.2.3 1-SI-4.7.A.2.g-3/71b 1-SR-3.5.3.3 1-SR-3.5.3.3(COMP) 1-SR-3.6.1.3.5(RCIC CM)	
1-CKV-71-589	RCIC COND PMP CKV	1-47E813-1 / A-3	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.3.3 1-SR-3.5.3.3(COMP)	
1-CKV-71-592	RCIC VC PMP DISCH	1-47E813-1 / D-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(RCIC CM)	
1-CKV-71-597	RCIC TRB EXH VC RLF	1-47E813-1 / E-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(RCIC CM)	
1-CKV-71-598	RCIC TRB EXH VC RLF	1-47E813-1 / E-8	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(RCIC CM)	
1-CKV-71-599	RCIC TRB EXH VC RLF	1-47E813-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(RCIC CM)	
1-CKV-71-600	RCIC TRB EXH VC RLF	1-47E813-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(RCIC CM)	
1-ECKV-73-1AA	EXCESS FLOW CHECK VALVE TO PDT-73-1A / 1B (LO)	1-47E812-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	
1-ECKV-73-1AB	EXCESS FLOW CHECK VALVE TO PDT-73-1A / 1B (HI)	1-47E812-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(3)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-73-2	HPCI STM LN INBD ISOL	1-47E812-1 / G-7	A	ACT	1	10	GA	MO	O	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/73a	
												STC	Q	1-SR-3.6.1.3.5(HPCI)	
												STO	Q	1-SR-3.6.1.3.5(HPCI)	
1-FCV-73-3	HPCI STM LN OUTBD ISOL	1-47E812-1 / G-6	A	ACT	1	10	GA	MO	O	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/73a	
												STC	Q	1-SR-3.6.1.3.5(HPCI)	
												STO	Q	1-SR-3.6.1.3.5(HPCI)	
1-FCV-73-6A	HPCI STM LN TO COND DRN	1-47E812-1 / E-2	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		
1-FCV-73-6B	HPCI STM LN TO COND DRN	1-47E812-1 / E-2	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		
1-FCV-73-16	HPCI TRB STM SPLY VLV	1-47E812-1 / G-3	B	ACT	2	10	GA	MO	C	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												STO	Q	1-SR-3.6.1.3.5(HPCI)	
1-SHV-73-23	HPCI TRB EXH VLV	1-47E812-1 / D-7	A/C	ACT	2	16	SCK	SA	C	O/C	N/A	LTJ	AppJ	1-SI-4.7.A.2.g-3/73b	
												CM	CM	1-SI-3.2.3 1-SR-3.5.1.7 1-SR-3.5.1.7(COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-73-26	PSC TO HPCI INBD ISOL	1-47E812-1 / B-6	B	ACT	2	16	GA	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												STC	Q	1-SR-3.6.1.3.5(HPCI)	
												STO	Q	1-SR-3.6.1.3.5(HPCI)	
1-FCV-73-27	PSC TO HPCI OUTBD ISOL	1-47E812-1 / G-5	B	ACT	2	16	GA	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												STC	Q	1-SR-3.6.1.3.5(HPCI)	
												STO	Q	1-SR-3.6.1.3.5(HPCI)	
1-FCV-73-30	HPCI PMP MIN FLOW	1-47E812-1 / D-5	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												STC	Q	1-SR-3.6.1.3.5(HPCI)	
												STO	Q	1-SR-3.6.1.3.5(HPCI)	
1-FCV-73-34	HPCI INJ OUTBD ISOL	1-47E812-1 / F-6	B	PASS	2	14	GA	MO	O/C	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
1-FCV-73-35	HPCI PMP TEST RTN TO CST	1-47E812-1 / F-6	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												STC	Q	1-SR-3.6.1.3.5(HPCI)	
1-FCV-73-40	HPCI PMP SUCTION ISOL	1-47E812-1 / H-5	B	ACT	2	14	GA	MO	O	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												STC	Q	1-SR-3.6.1.3.5(HPCI)	
												STO	Q	1-SR-3.6.1.3.5(HPCI)	
1-FCV-73-44	HPCI INJ INBD ISOL	1-47E812-1 / F-6	B	ACT	2	14	GA	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(G)	
												STC	Q	1-SR-3.6.1.3.5(HPCI)	
												STO	Q	1-SR-3.6.1.3.5(HPCI)	
1-FCV-73-45	HPCI TESTABLE CKV	1-47E812-1 / E-6	A/C	ACT	1	14	TCK	SA	C	O/C	N/A	RPI	2Y	1-SR-3.6.1.3.5(HPCI RO)	
												LTJ	AppJ		
												CM	CM		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-73-81	1-FCV-73-3 BYPASS	1-47E812-1 / G-6	A	ACT	1	1	GA	MO	O	C	FAI	RPI LTJ STC	2Y AppJ Q	1-SR-3.3.3.1.4(G) 1-SI-4.7.A.2.g-3/73a 1-SR-3.6.1.3.5(HPCI)	
1-CKV-73-505	CST TO HPCI PMP INLT	1-47E812-1 / H-5	C	ACT	2	14	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.7 1-SR-3.5.1.7(COMP)	
1-RFV-73-506	HPCI PMP SUCT RLF	1-47E812-1 / G-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-73-517	PSC TO HPCI PMP INLT	1-47E812-1 / B-6	C	ACT	2	16	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(HPCI)	
1-CKV-73-559	HPCI PMP MIN FLOW CHECK	1-47E812-1 / D-5	C	ACT	2	4	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.7 1-SR-3.5.1.7(COMP) 1-SR-3.6.1.3.5(HPCI CM)	
1-RFV-73-574	HPCI PMP GLND SL COND	1-47E812-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-SHV-73-587	AUX STEAM SUPPLY SHUTOFF VLV	1-47E812-1 / G-2	B	PASS	2	8	GA	M	C	C	N/A	NTR	NTR		
1-CKV-73-603	HPCI TRB EXH CHECK	1-47E812-1 / D-7	A/C	ACT	2	16	CK	SA	C	O/C	N/A	LTJ CM	AppJ CM	1-SI-4.7.A.2.g-3/73b 1-SI-3.2.3 1-SI-4.7.A.2.g-3/73b 1-SR-3.5.1.7 1-SR-3.5.1.7(COMP) 1-SR-3.6.1.3.5(HPCI CM)	
1-CKV-73-625	HPCI PMP GLND SL RTN	1-47E812-1 / B-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.7 1-SR-3.5.1.7(COMP)	
1-CKV-73-633	HPCI TRB EXH VC RLF	1-47E812-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(HPCI CM)	
1-CKV-73-634	HPCI TRB EXH VC RLF	1-47E812-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(HPCI CM)	
1-CKV-73-635	HPCI TRB EXH VC RLF	1-47E812-1 / E-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(HPCI CM)	
1-CKV-73-636	HPCI TRB EXH VC RLF	1-47E812-1 / E-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.6.1.3.5(HPCI CM)	
1-RPD-73-713	HPCI TRB EXH RPD	1-47E812-1 / D-4	D	ACT	2	16	RD	SA	C	O/C	N/A	RD	RV	1-SI-3.2.19	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-74-1	RHR PMP A PSC SUCT	1-47E811-1 / B-5	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q	1-SR-3.6.1.3.5(RHR I)	
												STO	Q	1-SR-3.6.1.3.5(RHR I)	
1-FCV-74-2	RHR PMP A SD CLG SUCT	1-47E811-1 / C-6	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		
1-FCV-74-7	RHR LP I MIN FLOW	1-47E811-1 / D-6	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q	1-SR-3.6.1.3.5(RHR I)	
												STO	Q	1-SR-3.6.1.3.5(RHR I)	
1-SHV-74-11	RHR PUMP A CNDS SUCTION SOV	1-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(H I)	
1-FCV-74-12	RHR PMP C PSC SUCT	1-47E811-1 / D-5	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q	1-SR-3.6.1.3.5(RHR I)	
												STO	Q	1-SR-3.6.1.3.5(RHR I)	
1-FCV-74-13	RHR PMP C SD CLG SUCT	1-47E811-1 / D-6	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		
1-SHV-74-23	RHR PUMP C CNDS SUCTION SOV	1-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(H I)	
1-FCV-74-24	RHR PMP B PSC SUCT	1-47E811-1 / C-4	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	Q	1-SR-3.6.1.3.5(RHR II)	
												STO	Q	1-SR-3.6.1.3.5(RHR II)	
1-FCV-74-25	RHR PMP B SD CLG SUCT	1-47E811-1 / D-4	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-74-30	RHR LP II MIN FLOW	1-47E811-1 / D-3	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	Q	1-SR-3.6.1.3.5(RHR II)	
												STO	Q	1-SR-3.6.1.3.5(RHR II)	
1-SHV-74-34	RHR PUMP B CNDS SUCTION SOV	1-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(H II)	
1-FCV-74-35	RHR PMP D PSC SUCT	1-47E811-1 / B-4	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	Q	1-SR-3.6.1.3.5(RHR II)	
												STO	Q	1-SR-3.6.1.3.5(RHR II)	
1-FCV-74-36	RHR PMP D SD CLG SUCT	1-47E811-1 / C-4	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		
1-SHV-74-45	RHR PUMP D CNDS SUCTION SOV	1-47E811-1 / B-4	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(H II)	
1-FCV-74-47	RHR SD CLG OUTBD ISOL	1-47E811-1 / E-5	A	ACT	1	20	GA	MO	C	C	FAI	LTP	2Y	1-SI-3.2.74(SDC)	PIV
												RPI	2Y		
												LTJ	AppJ		
												STC	CSD	1-SR-3.6.1.3.5(RHR CSD)	DTJ-7
1-FCV-74-48	RHR SD CLG INBD ISOL	1-47E811-1 / E-5	A	ACT	1	20	GA	MO	C	C	FAI	LTP	2Y	1-SI-3.2.74(SDC)	PIV
												RPI	2Y		
												LTJ	AppJ		
												STC	CSD	1-SR-3.6.1.3.5(RHR CSD)	DTJ-7
1-FCV-74-52	RHR LP I THROTTLE	1-47E811-1 / F-7	B	ACT	2	24	ANG	MO	O/C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q		
												STO	Q	1-SR-3.6.1.3.5(RHR I)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-74-53	RHR LP I INJ	1-47E811-1 / F-6	A	ACT	1	24	GA	MO	C	O/C	FAI	LTP	2Y	1-SI-3.2.74(RHR I)	, PIV
												RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	CSD	1-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	1-SR-3.6.1.3.5(RHR CSD)	DTJ-7
1-CKV-74-54	RHR LP I CKV	1-47E811-1 / F-6	A/C	ACT	1	24	CK	SA	C	O/C	N/A	LTP	2Y	1-SI-3.2.74(RHR I)	PIV,
												CVC	RO	1-SI-3.2.74(RHR I)	DTJ-2
												CVO	RO	1-SI-3.2.21(I)	DTJ-2
1-FCV-74-57	RHR LP I PSC RTN	1-47E811-1 / G-8	B	ACT	2	18	GA	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q	1-SR-3.6.1.3.5(RHR I)	
												STO	Q	1-SR-3.6.1.3.5(RHR I)	
1-FCV-74-58	RHR LP I PSC SPRAY	1-47E811-1 / F-8	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q	1-SR-3.6.1.3.5(RHR I)	
												STO	Q	1-SR-3.6.1.3.5(RHR I)	
1-FCV-74-59	RHR LP I PMP TEST RTN	1-47E811-1 / F-8	B	ACT	2	12	GL	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q	1-SR-3.6.1.3.5(RHR I)	
												STO	Q	1-SR-3.6.1.3.5(RHR I)	
1-FCV-74-60	RHR LP I CNTMT SPRAY OUTBD ISOL	1-47E811-1 / G-6	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q	1-SR-3.6.1.3.5(RHR I)	
												STO	Q	1-SR-3.6.1.3.5(RHR I)	
1-FCV-74-61	RHR LP I CNTMT SPRAY INBD ISOL	1-47E811-1 / G-5	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H I)	
												STC	Q	1-SR-3.6.1.3.5(RHR I)	
												STO	Q	1-SR-3.6.1.3.5(RHR I)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-74-66	RHR LP II THROTTLE	1-47E811-1 / F-3	B	ACT	2	24	ANG	MO	O/C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	Q		
												STO	Q	1-SR-3.6.1.3.5(RHR II)	
1-FCV-74-67	RHR LP II INJ	1-47E811-1 / F-4	A	ACT	1	24	GA	MO	C	O/C	FAI	LTP	2Y	1-SI-3.2.74(RHR II)	, PIV
												RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	CSD	1-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	1-SR-3.6.1.3.5(RHR CSD)	DTJ-7
1-CKV-74-68	RHR LP II CKV	1-47E811-1 / F-4	A/C	ACT	1	24	CK	SA	C	O/C	N/A	LTP	2Y	1-SI-3.2.74(RHR II)	PIV,
												CVC	RO	1-SI-3.2.74(RHR II)	DTJ-2
												CVO	RO	1-SI-3.2.21(II)	DTJ-2
1-FCV-74-71	RHR LP II PSC RTN	1-47E811-1 / G-3	B	ACT	2	18	GA	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	Q	1-SR-3.6.1.3.5(RHR II)	
												STO	Q	1-SR-3.6.1.3.5(RHR II)	
1-FCV-74-72	RHR LP II PSC SPRAY	1-47E811-1 / F-3	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	Q	1-SR-3.6.1.3.5(RHR II)	
												STO	Q	1-SR-3.6.1.3.5(RHR II)	
1-FCV-74-73	RHR LP II PMP TEST RTN	1-47E811-1 / F-3	B	ACT	2	12	GL	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	Q	1-SR-3.6.1.3.5(RHR II)	
												STO	Q	1-SR-3.6.1.3.5(RHR II)	
1-FCV-74-74	RHR LP II CNTMT SPRAY OUTBD ISOL	1-47E811-1 / G-4	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
												STC	Q	1-SR-3.6.1.3.5(RHR II)	
												STO	Q	1-SR-3.6.1.3.5(RHR II)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-74-75	RHR LP II CNTMT SPRAY INBD ISOL	1-47E811-1 / G-5	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	1-SR-3.3.3.1.4(H II) 1-SR-3.6.1.3.5(RHR II) 1-SR-3.6.1.3.5(RHR II)	
1-SHV-74-91	RHR TO FUEL POOL F/D SOV	1-47E811-1 / D-4	B	PASS	2	8	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(HCT)	
1-FCV-74-98	RHR PMP B SUCT XTIE	1-47E811-1 / C-4	B	PASS	2	14	GA	MO	C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
1-FCV-74-99	RHR PMP D SUCT XTIE	1-47E811-1 / C-4	B	PASS	2	14	GA	MO	C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
1-FCV-74-101	RHR HTX B-D DISCH XTIE	1-47E811-1 / D-1	B	PASS	2	10	GA	MO	C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(H II)	
1-SMV-74-226	RHR PMP SUCT SMPL VLV	1-47E811-1 / C-5	B	PASS	2	0.25	GL	M	LC	C	N/A	NTR	NTR		
1-SMV-74-227	RHR PMP SUCT SMPL VLV	1-47E811-1 / C-5	B	PASS	2	0.25	GL	M	LC	C	N/A	NTR	NTR		
1-RFV-74-509A	RHR PMP A SUCT RLF	1-47E811-1 / B-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-509B	RHR PMP B SUCT RLF	1-47E811-1 / D-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-509C	RHR PMP C SUCT RLF	1-47E811-1 / D-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-509D	RHR PMP D SUCT RLF	1-47E811-1 / B-3	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-74-559A	RHR PMP A DISCH CKV	1-47E811-1 / B-7	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	1-SR-3.5.1.6(RHR I) 1-SR-3.5.1.6(RHR I-COMP) 1-SR-3.5.1.6(RHR I) 1-SR-3.5.1.6(RHR I-COMP)	
1-CKV-74-559B	RHR PMP B DISCH CKV	1-47E811-1 / D-3	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	1-SR-3.5.1.6(RHR II) 1-SR-3.5.1.6(RHR II-COMP) 1-SR-3.5.1.6(RHR II) 1-SR-3.5.1.6(RHR II-COMP)	
1-CKV-74-559C	RHR PMP C DISCH CKV	1-47E811-1 / C-7	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	1-SR-3.5.1.6(RHR I) 1-SR-3.5.1.6(RHR I-COMP) 1-SR-3.5.1.6(RHR I) 1-SR-3.5.1.6(RHR I-COMP)	
1-CKV-74-559D	RHR PMP D DISCH CKV	1-47E811-1 / B-3	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	1-SR-3.5.1.6(RHR II) 1-SR-3.5.1.6(RHR II-COMP) 1-SR-3.5.1.6(RHR II) 1-SR-3.5.1.6(RHR II-COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-CKV-74-560A	RHR PMP A MIN FLOW	1-47E811-1 / B-6	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.6(RHR I) 1-SR-3.5.1.6(RHR I-COMP)	
1-CKV-74-560B	RHR PMP A MIN FLOW	1-47E811-1 / D-3	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.6(RHR II) 1-SR-3.5.1.6(RHR II-COMP)	
1-CKV-74-560C	RHR PMP A MIN FLOW	1-47E811-1 / D-7	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.6(RHR I) 1-SR-3.5.1.6(RHR I-COMP)	
1-CKV-74-560D	RHR PMP A MIN FLOW	1-47E811-1 / B-3	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.6(RHR II) 1-SR-3.5.1.6(RHR II-COMP)	
1-RFV-74-578A	RHR HTX A RLF	1-47E811-1 / B-7	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-578B	RHR HTX B RLF	1-47E811-1 / B-2	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-578C	RHR HTX C RLF	1-47E811-1 / C-8	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-578D	RHR HTX D RLF	1-47E811-1 / B-3	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-587A	RHR LP I DISCH HDR RLF	1-47E811-1 / G-7	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-587B	RHR LP II DISCH HDR RLF	1-47E811-1 / G-3	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-74-659	RHR SD CLG SPLY RLF	1-47E811-1 / E-5	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-74-661	RHR THERMAL RLF	1-47E811-1 / F-5	A/C	ACT	1	0.75	CK	SA	C	O/C	N/A	LTP LTJ CVC CVO	2Y AppJ RO RO	1-SI-3.2.74(SDC) 1-SI-3.2.74(SDC) 1-SI-3.2.74(SDC)	PIV : Series Pair DTJ-2 DTJ-2
1-CKV-74-662	RHR THERMAL RLF	1-47E811-1 / D-8	A/C	ACT	1	0.75	CK	SA	C	O/C	N/A	LTP LTJ CVC CVO	2Y AppJ RO RO	1-SI-3.2.74(SDC) 1-SI-3.2.74(SDC) 1-SI-3.2.74(SDC)	PIV : Series Pair DTJ-2 DTJ-2

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-SHV-74-670	CNDS FLUSH AND FILL TO SDC SPLY SHUTOFFF VLV	1-47E811-1 / E-5	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
1-SHV-74-675	CNDS FLUSH & FILL TO DW SPRAY HDR SHUTOFF VLV	1-47E811-1 / G-6	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
1-SHV-74-681A	CNDS FLUSH & FILL TO RHR/SDC RTN SHUTOFF VLV	1-47E811-1 / F-7	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
1-SHV-74-681B	CNDS FLUSH & FILL TO RHR/SDC RTN SHUTOFF VLV	1-47E811-1 / F-3	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
1-SHV-74-699	CNDS FLUSH & FILL TO HEAD SPRAY LN SOV	1-47E811-1 / G-3	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
1-CKV-74-706	CNDS FILL TO HEAD SPRAY CHECK VLV	1-47E811-1 / H-4	C	ACT	2	1	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.14(II)	
1-DRV-74-722	PSC DRAIN ISOLATION	1-47E811-1 / E-4	B	PASS	2	8	GA	M	C	C	N/A	NTR	NTR		
1-CKV-74-792	RHR LP I KP FILL	1-47E811-1 / H-6	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.14(I) 1-SI-3.2.31	
1-CKV-74-802	RHR LP II KP FILL	1-47E811-1 / H-3	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.14(II) 1-SI-3.2.31	
1-CKV-74-803	RHR LP II KP FILL	1-47E811-1 / H-3	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.14(II) 1-SI-3.2.31	
1-CKV-74-804	RHR LP I KP FILL	1-47E811-1 / H-6	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.14(I) 1-SI-3.2.31	
1-CKV-74-830	CNDS FLUSH & FILL TO DW SPRAY BYPASS CHECK VLV	1-47E811-1 / H-6	C	ACT	2	0.75	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.14(I)	
1-SHV-75-3	CS PMP 1A CNDS SUCT VLV	1-47E814-1 / A-5	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(I/1)	
1-FCV-75-9	CS LP I MIN FLOW	1-47E814-1 / F-5	B	ACT	2	3	GA	MO	O	O/C	FAI	RPI STC STO	2Y Q Q	1-SR-3.3.3.1.4(I/1) 1-SR-3.6.1.3.5(CS I) 1-SR-3.6.1.3.5(CS I)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-SHV-75-12	CS PMP 1C CNDS SUCT VLV	1-47E814-1 / A-5	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(I/1)	
1-FCV-75-22	CS LP I PMP TEST	1-47E814-1 / F-5	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(I/1)	
												STC	Q	1-SR-3.5.1.6(CS I) 1-SR-3.5.1.6(CS I-COMP)	
1-FCV-75-23	CS LP I INJ	1-47E814-1 / F-6	B	PASS	2	12	GA	MO	O	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(I/1)	
1-FCV-75-25	CS LP I INJ	1-47E814-1 / F-6	A	ACT	1	12	GA	MO	C	O/C	FAI	LTP	2Y	1-SI-3.2.75(CS I)	, PIV
												RPI	2Y	1-SR-3.3.3.1.4(I/1)	
												STC	CSD	1-SR-3.6.1.3.5(CS CSD)	DTJ-7
												STO	CSD	1-SR-3.6.1.3.5(CS CSD)	DTJ-7
1-CKV-75-26	CS LP I CKV	1-47E814-1 / F-7	A/C	ACT	1	12	CK	SA	C	O/C	N/A	LTP	2Y	1-SI-3.2.75(CS I)	PIV,
												CVC	RO	1-SI-3.2.27(I) 1-SI-3.2.75(CS I)	DTJ-2
												CVO	RO	1-SI-3.2.27(I)	DTJ-2
1-ECKV-75-28	EXCESS FLOW CKV TO 1-PDIS-75-28	1-47E814-1 / E-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-SHV-75-31	CS PMP 1B CNDS SUCT VLV	1-47E814-1 / A-3	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(I/2)	
1-FCV-75-37	CS LP II MIN FLOW	1-47E814-1 / F-4	B	ACT	2	3	GA	MO	O	O/C	FAI	RPI	2Y	1-SR-3.3.3.1.4(I/2)	
												STC	Q	1-SR-3.6.1.3.5(CS II)	
												STO	Q	1-SR-3.6.1.3.5(CS II)	
1-SHV-75-40	CS PMP 1D CNDS SUCT VLV	1-47E814-1 / A-3	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	1-SR-3.3.3.1.4(I/2)	
1-FCV-75-50	CS LP II PMP TEST	1-47E814-1 / F-4	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI	2Y	1-SR-3.3.3.1.4(I/2)	
												STC	Q	1-SR-3.5.1.6(CS II) 1-SR-3.5.1.6(CS II-COMP)	
1-FCV-75-51	CS LP II INJ	1-47E814-1 / G-6	B	PASS	2	12	GA	MO	O	O	FAI	RPI	2Y	1-SR-3.3.3.1.4(I/2)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-75-53	CS LP II INJ	1-47E814-1 / G-6	A	ACT	1	12	GA	MO	C	O/C	FAI	LTP	2Y	1-SI-3.2.75(CS II)	, PIV
												RPI	2Y	1-SR-3.3.3.1.4(I/2)	
												STC	CSD	1-SR-3.6.1.3.5(CS CSD)	DTJ-7
												STO	CSD	1-SR-3.6.1.3.5(CS CSD)	DTJ-7
1-CKV-75-54	CS LP II CKV	1-47E814-1 / G-7	A/C	ACT	1	12	CK	SA	C	O/C	N/A	LTP	2Y	1-SI-3.2.75(CS II)	PIV,
												CVC	RO	1-SI-3.2.27(II)	DTJ-2
												CVO	RO	1-SI-3.2.75(CS II) 1-SI-3.2.27(II)	DTJ-2
1-ECKV-75-56	EXCESS FLOW CKV TO 1-PDIS-75-56	1-47E814-1 / F-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	1-SR-3.6.1.3.8(2)	
1-FCV-75-57	CS DRN PMP A INBD ISOL	1-47E814-1 / B-4	B	ACT	2	3	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(I/1)	
												FSC	Q	1-SR-3.6.1.3.5(CS I)	
												STC	Q	1-SR-3.6.1.3.5(CS I)	
1-FCV-75-58	CS DRN PMP A OUTBD ISOL	1-47E814-1 / B-5	B	ACT	2	3	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(I/1)	
												FSC	Q	1-SR-3.6.1.3.5(CS I)	
												STC	Q	1-SR-3.6.1.3.5(CS I)	
1-RFV-75-507A	CS PMP A SUCT RLF	1-47E814-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-75-507B	CS PMP B SUCT RLF	1-47E814-1 / C-2	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-75-507C	CS PMP C SUCT RLF	1-47E814-1 / C-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-75-507D	CS PMP D SUCT RLF	1-47E814-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-75-537A	CS PMP A DISCH CKV	1-47E814-1 / D-5	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC	Q	1-SR-3.5.1.6(CS I) 1-SR-3.5.1.6(CS I-COMP)	
												CVO	Q	1-SR-3.5.1.6(CS I) 1-SR-3.5.1.6(CS I-COMP)	
1-CKV-75-537B	CS PMP B DISCH CKV	1-47E814-1 / D-3	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC	Q	1-SR-3.5.1.6(CS II) 1-SR-3.5.1.6(CS II-COMP)	
												CVO	Q	1-SR-3.5.1.6(CS II) 1-SR-3.5.1.6(CS II-COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-CKV-75-537C	CS PMP C DISCH CKV	1-47E814-1 / D-6	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC CVO	Q Q	1-SR-3.5.1.6(CS I) 1-SR-3.5.1.6(CS I-COMP) 1-SR-3.5.1.6(CS I) 1-SR-3.5.1.6(CS I-COMP)	
1-CKV-75-537D	CS PMP D DISCH CKV	1-47E814-1 / D-4	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC CVO	Q Q	1-SR-3.5.1.6(CS II) 1-SR-3.5.1.6(CS II-COMP) 1-SR-3.5.1.6(CS II) 1-SR-3.5.1.6(CS II-COMP)	
1-RFV-75-543A	CS LP I DISCH RLF	1-47E814-1 / F-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-RFV-75-543B	CS LP II DISCH RLF	1-47E814-1 / E-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	1-SI-3.2.9	
1-CKV-75-570A	CS PMP A MIN FLW	1-47E814-1 / D-5	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.6(CS I) 1-SR-3.5.1.6(CS I-COMP)	
1-CKV-75-570B	CS PMP B MIN FLW	1-47E814-1 / D-2	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.6(CS II) 1-SR-3.5.1.6(CS II-COMP)	
1-CKV-75-570C	CS PMP C MIN FLW	1-47E814-1 / D-6	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.6(CS I) 1-SR-3.5.1.6(CS I-COMP)	
1-CKV-75-570D	CS PMP D MIN FLW	1-47E814-1 / D-4	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	1-SI-3.2.3 1-SR-3.5.1.6(CS II) 1-SR-3.5.1.6(CS II-COMP)	
1-CKV-75-580A	CNDS FLUSH & FILL CHECK VLV	1-47E814-1 / G-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.15(I)	
1-CKV-75-580B	CNDS FLUSH & FILL CHECK VLV	1-47E814-1 / H-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.15(II)	
1-CKV-75-606	CS LP I KP FILL CKV	1-47E814-1 / F-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.15(I)	
1-CKV-75-607	CS LP I KP FILL CKV	1-47E814-1 / F-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.15(I)	
1-CKV-75-609	CS LP II KP FILL CKV	1-47E814-1 / H-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.15(II)	
1-CKV-75-610	CS LP II KP FILL CKV	1-47E814-1 / H-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	1-SI-3.2.3 1-SI-3.2.15(II)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-77-2A	DW FLR DRN SUMP INBD ISOL	1-47E852-1 / C-4	A	ACT	2	3	BA	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(J)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/77a	
												FSC	Q	1-SR-3.6.1.3.5(77)	
												STC	Q	1-SR-3.6.1.3.5(77)	
1-FCV-77-2B	DW FLR DRN SUMP OUTBD ISOL	1-47E852-1 / C-4	A	ACT	2	3	BA	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(J)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/77a	
												FSC	Q	1-SR-3.6.1.3.5(77)	
												STC	Q	1-SR-3.6.1.3.5(77)	
1-FCV-77-15A	DW EQ DRN SUMP INBD ISOL	1-47E852-2 / D-3	A	ACT	2	3	BA	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(J)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/77b	
												FSC	Q	1-SR-3.6.1.3.5(77)	
												STC	Q	1-SR-3.6.1.3.5(77)	
1-FCV-77-15B	DW EQ DRN SUMP OUTBD ISOL	1-47E852-2 / D-3	A	ACT	2	3	BA	AO	O	C	C	RPI	2Y	1-SR-3.3.3.1.4(J)	
												LTJ	AppJ	1-SI-4.7.A.2.g-3/77b	
												FSC	Q	1-SR-3.6.1.3.5(77)	
												STC	Q	1-SR-3.6.1.3.5(77)	
1-FCV-78-61	RHR TO FPC SUPPLY	1-47E855-1 / H-6	B	PASS	2	6	GA	MO	C	C	FAI	RPI	2Y	1-SI-3.2.10.P	
1-FCV-85-37C	SDIV DRN ISOL WEST	1-47E820-6 / B-6	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.2.1(85)	
												FSC	Q	1-SR-3.1.8.2	
												STC	Q	1-SR-3.1.8.2	
1-FCV-85-37E	SDIV DRN ISOL EAST	1-47E820-6 / B-4	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.2.1(85)	
												FSC	Q	1-SR-3.1.8.2	
												STC	Q	1-SR-3.1.8.2	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
1-FCV-85-82A	SCRM DISCH HDR VT W	1-47E820-6 / G-7	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.2.1(85)	
												FSC	Q	1-SR-3.1.8.2	
												STC	Q	1-SR-3.1.8.2	
1-FCV-85-83A	SCRM DISCH HDR VT E	1-47E820-6 / G-3	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	1-SR-3.3.3.2.1(85)	
												FSC	Q	1-SR-3.1.8.2	
												STC	Q	1-SR-3.1.8.2	
1-CKV-85-589	CHGING WTR (185 TOTAL)	1-47E820-2 / D-7	C	ACT	2	0.5	CK	SA	O/C	C	N/A	BDO	RO	1-SI-3.2.18	DTJ-3
												CVC	RO	1-SI-3.2.18	DTJ-3
1-CKV-85-806A	CRD BACKFILL LINE CHECK VLV	1-47E810-1 / H-1	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	0-SI-3.2.3	
1-CKV-85-806B	CRD BACKFILL LINE CHECK VLV	1-47E810-1 / H-1	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	0-SI-3.2.3	
1-CKV-85-806C	CRD BACKFILL LINE CHECK VLV	1-47E810-1 / G-1	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	0-SI-3.2.3	
1-CKV-85-806D	CRD BACKFILL LINE CHECK VLV	1-47E810-1 / G-1	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	0-SI-3.2.3	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-PCV-1-4	MS LN A RLF	2-47E801-1 / H-7	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV
2-PCV-1-5	MS LN A RLF	2-47E801-1 / H-6	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV : ADS
2-ECKV-1-13A	EXCESS FLOW CKV TO FT-1-13 (X-34A)	2-47E801-1 / H-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-ECKV-1-13B	EXCESS FLOW CKV TO FT-1-13 (X-30A)	2-47E801-1 / H-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-FCV-1-14	MS LN A INBD ISOL	2-47E801-1 / G-5	A	ACT	1	26	GL	AO	O	C	C	RPI LTJ STC PSC FSC	2Y AppJ CSD Q RO	2-SR-3.3.3.1.4(MSIV) 2-SR-3.6.1.3.10(A) 2-GOI-100-12A 2-SR-3.6.1.3.6 2-SR-3.3.1.1.8(5) 2-SI-3.2.12(INBD)	 DTJ-4 DTJ-4
2-FCV-1-15	MS LN A OUTBD ISOL	2-47E801-1 / G-4	*A	ACT	1	26	GL	AO	O	C	C	RPI LTJ FSC STC PSC	2Y AppJ CSD CSD Q	2-SR-3.3.3.1.4(MSIV) 2-SR-3.6.1.3.10(A) 2-SI-3.2.12(OUTBD) 2-GOI-100-12A 2-SR-3.6.1.3.6 2-SR-3.3.1.1.8(5)	 DTJ-4 DTJ-4
2-PCV-1-18	MS LN B RLF	2-47E801-1 / F-8	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV
2-PCV-1-19	MS LN B RLF	2-47E801-1 / F-7	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV : ADS
2-PCV-1-22	MS LN B RLF	2-47E801-1 / G-6	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV : ADS

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-PCV-1-23	MS LN B RLF	2-47E801-1 / G-6	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV
2-ECKV-1-25A	EXCESS FLOW CKV TO FT-1-25 (X-30B)	2-47E801-1 / H-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-ECKV-1-25B	EXCESS FLOW CKV TO FT-1-25 (X-34B)	2-47E801-1 / H-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-FCV-1-26	MS LN B INBD ISOL	2-47E801-1 / G-5	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(MSIV)	
												LTJ	AppJ	2-SR-3.6.1.3.10(B)	
												STC	CSD	2-GOI-100-12A 2-SR-3.6.1.3.6	DTJ-4
												PSC	Q	2-SR-3.3.1.1.8(5)	
												FSC	RO	2-SI-3.2.12(INBD)	DTJ-4
2-FCV-1-27	MS LN B OUTBD ISOL	2-47E801-1 / G-4	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(MSIV)	
												LTJ	AppJ	2-SR-3.6.1.3.10(B OUTBD)	
												FSC	CSD	2-SI-3.2.12(OUTBD)	DTJ-4
												STC	CSD	2-GOI-100-12A 2-SR-3.6.1.3.6	DTJ-4
												PSC	Q	2-SR-3.3.1.1.8(5)	
2-PCV-1-30	MS LN C RLF	2-47E801-1 / F-8	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV : ADS
2-PCV-1-31	MS LN C RLF	2-47E801-1 / F-7	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV : ADS
2-PCV-1-34	MS LN C RLF	2-47E801-1 / E-6	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV : ADS
2-ECKV-1-36A	EXCESS FLOW CKV TO FT-1-36 (X-34C)	2-47E801-1 / D-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-ECKV-1-36B	EXCESS FLOW CKV TO FT-1-36 (X-30C)	2-47E801-1 / D-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-1-37	MS LN C INBD ISOL	2-47E801-1 / E-5	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(MSIV)	
												LTJ	AppJ	2-SR-3.6.1.3.10(C INTBD)	
												STC	CSD	2-GOI-100-12A 2-SR-3.6.1.3.6	DTJ-4
												PSC	Q	2-SR-3.3.1.1.8(5)	
												FSC	RO	2-SI-3.2.12(INBD)	DTJ-4
2-FCV-1-38	MS LN C OUTBD ISOL	2-47E801-1 / E-4	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(MSIV)	
												LTJ	AppJ	2-SR-3.6.1.3.10(C OUTBD)	
												FSC	CSD	2-SI-3.2.12(OUTBD)	DTJ-4
												STC	CSD	2-GOI-100-12A 2-SR-3.6.1.3.6	DTJ-4
												PSC	Q	2-SR-3.3.1.1.8(5)	
2-PCV-1-41	MS LN D RLF	2-47E801-1 / E-7	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV
2-PCV-1-42	MS LN D RLF	2-47E801-1 / E-6	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV
2-ECKV-1-50A	EXCESS FLOW CKV TO FT-1-50 (X-30D)	2-47E801-1 / D-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-ECKV-1-50B	EXCESS FLOW CKV TO FT-1-50 (X-34D)	2-47E801-1 / D-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-FCV-1-51	MS LN D INBD ISOL	2-47E801-1 / E-5	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(MSIV)	
												LTJ	AppJ	2-SR-3.6.1.3.10(D INBD)	
												STC	CSD	2-GOI-100-12A 2-SR-3.6.1.3.6	DTJ-4
												PSC	Q	2-SR-3.3.1.1.8(5)	
												FSC	RO	2-SI-3.2.12(INBD)	DTJ-4

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-1-52	MS LN D OUTBD ISOL	2-47E801-1 / E-4	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(MSIV)	
												LTJ	AppJ	2-SR-3.6.1.3.10(D)	
												FSC	CSD	2-SI-3.2.12(OUTBD)	DTJ-4
												STC	CSD	2-GOI-100-12A	DTJ-4
												PSC	Q	2-SR-3.6.1.3.6 2-SR-3.3.1.1.8(5)	
2-FCV-1-55	MS DRN LN INBD ISOL	2-47E801-1 / F-5	A	ACT	1	3	GA	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(A)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/1e	
												STC	Q	2-SR-3.6.1.3.5(MS)	
2-FCV-1-56	MS DRN LN OUTBD ISOL	2-47E801-1 / F-4	A	ACT	1	3	GA	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(A)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/1e	
												STC	Q	2-SR-3.6.1.3.5(MS)	
2-FCV-1-57	MS DRN TO COND ISOL	2-47E801-1 / F-3	B	PASS	2	3	GL	MO	O	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(A)	
2-FCV-1-58	MS DRN TO COND ISOL	2-47E801-1 / F-3	B	ACT	2	3	GL	MO	C	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(A)	
												STO	Q	2-SR-3.6.1.3.5(MS)	
2-FCV-1-59	MS DRN TO COND ISOL	2-47E801-1 / F-2	B	ACT	2	4	GA	MO	C	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(A)	
												STO	Q	2-SR-3.6.1.3.5(MS)	
2-FCV-1-127	RFPT 2A HP STOP VLV	2-47E801-2 / B-7	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(C)	
												FSC	Q	2-SI-3.2.29	
												STC	Q	2-SI-3.2.29	
2-FCV-1-135	RFPT 2B HP STOP VLV	2-47E801-2 / B-6	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(C)	
												FSC	Q	2-SI-3.2.29	
												STC	Q	2-SI-3.2.29	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-1-143	RFPT 2C HP STOP VLV	2-47E801-2 / B-5	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(C)	
												FSC	Q	2-SI-3.2.29	
												STC	Q	2-SI-3.2.29	
2-FCV-1-145	STM SEAL BYPASS ISOL	2-47E807-2 / C-6	B	ACT	2	4	GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(B)	
												STC	CSD	2-SI-3.2.30	DTJ-12
2-PCV-1-147	MS STM SEAL ISOL	2-47E807-2 / C-6	B	ACT	2	4	ANG	AO	TH	C	C	RPI	2Y	2-SR-3.3.3.1.4(B)	
												FSC	CSD	2-SI-3.2.30	DTJ-11
												STC	CSD	2-SI-3.2.30	DTJ-11
2-PCV-1-151	SJAE 2A STG 1/2 PREG	2-47E801-2 / B-4	B	ACT	2	1.5	GL	AO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(B)	
												FSC	CSD	2-SI-3.2.30	DTJ-8
												STC	CSD	2-SI-3.2.30	DTJ-8
2-PCV-1-153	SJAE 2B STG 1/2 PREG	2-47E801-2 / B-3	B	ACT	2	1.5	GL	AO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(B)	
												FSC	CSD	2-SI-3.2.30	DTJ-8
												STC	CSD	2-SI-3.2.30	DTJ-8
2-FCV-1-154	AUX STM TO STM SEAL ISOL	2-47E807-2 / B-5	B	PASS	2	4	GA	MO	C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(B)	
2-PCV-1-166	SJAE 2A STG 3 PREG	2-47E801-2 / B-4	B	ACT	2	1.5	GL	AO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(B)	
												FSC	CSD	2-SI-3.2.30	DTJ-8
												STC	CSD	2-SI-3.2.30	DTJ-8
2-PCV-1-167	SJAE 2B STG 3 PREG	2-47E801-2 / B-3	B	ACT	2	1.5	GL	AO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(B)	
												FSC	CSD	2-SI-3.2.30	DTJ-8
												STC	CSD	2-SI-3.2.30	DTJ-8

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-1-168	MS LN A DRN ISOL	2-47E801-1 / F-3	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI STO	2Y CSD	2-SR-3.3.3.1.4(A) 2-SI-3.2.32	 DTJ-9
2-FCV-1-169	MS LN B DRN ISOL	2-47E801-1 / F-3	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI STO	2Y CSD	2-SR-3.3.3.1.4(A) 2-SI-3.2.32	 DTJ-9
2-FCV-1-170	MS LN C DRN ISOL	2-47E801-1 / E-3	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI STO	2Y CSD	2-SR-3.3.3.1.4(A) 2-SI-3.2.32	 DTJ-9
2-FCV-1-171	MS LN D DRN ISOL	2-47E801-1 / E-3	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI STO	2Y CSD	2-SR-3.3.3.1.4(A) 2-SI-3.2.32	 DTJ-9
2-PCV-1-179	MS LN A RLF	2-47E801-1 / G-6	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV
2-PCV-1-180	MS LN D RLF	2-47E801-1 / E-6	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	2-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 2-SR-3.4.3.2	MSRV
2-CKV-1-742	OG PREHTR 2A SPLY	2-47E801-2 / D-2	C	ACT	2	3/4	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3	
2-CKV-1-744	OG PREHTR 2B SPLY	2-47E801-2 / C-2	C	ACT	2	3/4	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3	
2-ECKV-3-227A	EXCESS FLOW CK VLV TO LITS-003-0046A	2-47E803-5 / F-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	
2-ECKV-3-228A	EXCESS FLOW CK VLV TO LT-003-0055	2-47E803-5 / E-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	
2-ECKV-3-229A	EXCESS FLOW CK VLV TO LT-003-0055	2-47E803-5 / D-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	
2-ECKV-3-231A	EXCESS FLOW CK VLV TO PI-003-0190	2-47E803-5 / D-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.8(6)	
2-ECKV-3-235A	EXCESS FLOW CK VLV TO LT-003-0058C	2-47E803-5 / G-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-3-236A	EXCESS FLOW CK VLV TO LT-003-0060	2-47E803-5 / G-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-3-240A	EXCESS FLOW CK VLV TO PDT-003-0051	2-47E803-5 / E-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-3-554	FDWTR LN A OUTBD ISOL	2-47E803-1 / H-6	A/C	ACT	1	24	CK	SA	O	C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/3a	
												BDO	RO	2-SI-3.2.31	DTJ-1
												CVC	RO	2-SI-4.7.A.2.g-3/3a	DTJ-1
2-CKV-3-558	FDWTR LN A INBD ISOL	2-47E803-5 / F-5	A/C	ACT	1	24	CK	SA	O	O/C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/3a	
												CVC	RO	2-SI-4.7.A.2.g-3/3a	DTJ-1
												CVO	RO	2-SI-3.2.31	DTJ-1
2-CKV-3-568	FDWTR LN B OUTBD ISOL	2-47E803-1 / F-6	A/C	ACT	1	24	CK	SA	O	C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/3b	
												BDO	RO	2-SI-3.2.31	DTJ-1
												CVC	RO	2-SI-4.7.A.2.g-3/3b	DTJ-1
2-CKV-3-572	FDWTR LN B INBD ISOL	2-47E803-5 / E-5	A/C	ACT	1	24	CK	SA	O	O/C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/3b	
												CVC	RO	2-SI-4.7.A.2.g-3/3b	DTJ-1
												CVO	RO	2-SI-3.2.31	DTJ-1
2-ECKV-3-816	EXCESS FLOW CKV ON REACTOR WTR REFERENCE LEG	2-47E803-5 / F-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	
2-ECKV-3-817	EXCESS FLOW CKV ON REACTOR WTR REFERENCE LEG	2-47E803-5 / F-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	
2-ECKV-3-818	EXCESS FLOW CKV ON REACTOR WTR REFERENCE LEG	2-47E803-5 / G-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-3-819	EXCESS FLOW CKV ON REACTOR WTR REFERENCE LEG	2-47E803-5 / G-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-FCV-6-100	TSV #1 DRN ISOL	2-47E807-1 / G-8	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(B)	
												STC	Q	2-SI-3.2.35	
2-FCV-6-101	TSV #2 DRN ISOL	2-47E807-1 / F-8	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(B)	
												STC	Q	2-SI-3.2.35	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-6-102	TSV #3 DRN ISOL	2-47E807-1 / E-8	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(B)	
												STC	Q	2-SI-3.2.35	
2-FCV-6-103	TSV #4 DRN ISOL	2-47E807-1 / D-8	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(B)	
												STC	Q	2-SI-3.2.35	
2-FCV-6-122	RFPT 2A STOP VLV DRN	2-47E807-2 / G-6	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(C)	
												STC	Q	2-SI-3.2.35	
2-FCV-6-127	RFPT 2B STOP VLV DRN	2-47E807-2 / G-4	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(C)	
												STC	Q	2-SI-3.2.35	
2-FCV-6-132	RFPT 2C STOP VLV DRN	2-47E807-2 / G-2	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(C)	
												STC	Q	2-SI-3.2.35	
2-FCV-6-153	RFPT 2A STOP VLV DRN	2-47E807-2 / G-6	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(C)	, , ,
												STC	Q	2-SI-3.2.35	,
2-FCV-6-155	RFPT 2B STOP VLV DRN	2-47E807-2 / G-3	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(C)	, , ,
												STC	Q	2-SI-3.2.35	,
2-FCV-6-157	RFPT 2C STOP VLV DRN	2-47E807-2 / G-1	B	ACT	2		GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(C)	, , ,
												STC	Q	2-SI-3.2.35	,
2-CKV-6-822	SJAE 2B COND DRN	2-47E805-3 / G-7	C	ACT	2	0.5	CK	SA	O	C	N/A	CM	CM	2-SI-3.2.3	
2-CKV-6-826	SJAE 2B COND DRN	2-47E805-3 / G-6	C	ACT	2	0.5	CK	SA	O	C	N/A	CM	CM	2-SI-3.2.3	
2-CKV-10-506	MSRV TL PIPE A VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-507	MSRV TL PIPE B VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-508	MSRV TL PIPE C VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-10-509	MSRV TL PIPE D VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-510	MSRV TL PIPE E VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-511	MSRV TL PIPE F VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-512	MSRV TL PIPE G VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-513	MSRV TL PIPE H VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-514	MSRV TL PIPE J VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-515	MSRV TL PIPE K VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-516	MSRV TL PIPE L VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-519	MSRV TL PIPE M VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-520	MSRV TL PIPE N VC RLF	2-47E817-1 / D-1	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-521	MSRV TL PIPE A VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-522	MSRV TL PIPE B VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-523	MSRV TL PIPE C VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-524	MSRV TL PIPE D VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-525	MSRV TL PIPE E VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-526	MSRV TL PIPE F VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-527	MSRV TL PIPE G VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-528	MSRV TL PIPE H VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-529	MSRV TL PIPE J VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-530	MSRV TL PIPE K VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-10-531	MSRV TL PIPE L VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-532	MSRV TL PIPE M VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-CKV-10-533	MSRV TL PIPE N VC RLF	2-47E817-1 / D-2	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.11	
2-SHV-12-623	STM TO RCIC DR TRAP OUTL SHUTOFF VLV	2-47E815-4 / G-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-BYV-12-625	STM TO RCIC DR TRAP BYPASS VLV	2-47E815-4 / F-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-SHV-12-635	STM INL TO U2 HPCI TRAP OUTL SHUTOFF VLV	2-47E815-4 / F-2	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-BYV-12-637	STM INL TO U2 HPCI TRAP BYPASS VLV	2-47E815-4 / F-2	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-SHV-12-822	WASHDOWN STM DR TRAP DISCH SHUTOFF VLV	0-47E815-1 / G-1	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-FCV-23-34	RHR HTX A OUTLT	2-47E858-1 / F-7	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI	2Y	2-SI-3.2.10.B	
												STC	Q	2-SI-4.5.C.1(A)	
												STO	Q	2-SI-4.5.C.1(A)	
2-FCV-23-40	RHR HTX C OUTLT	2-47E858-1 / H-7	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI	2Y	2-SI-3.2.10.B	
												STC	Q	2-SI-4.5.C.1(C)	
												STO	Q	2-SI-4.5.C.1(C)	
2-FCV-23-46	RHR HTX B OUTLT	2-47E858-1 / F-4	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI	2Y	2-SI-3.2.10.B	
												STC	Q	2-SI-4.5.C.1(B)	
												STO	Q	2-SI-4.5.C.1(B)	
2-FCV-23-52	RHR HTX D OUTLT	2-47E858-1 / H-4	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI	2Y	2-SI-3.2.10.B	
												STC	Q	2-SI-4.5.C.1(D)	
												STO	Q	2-SI-4.5.C.1(D)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-23-57	STANDBY COOLANT ISOL	2-47E858-1 / E-3	B	PASS	3	10	GA	MO	C	C	FAI	RPI	2Y	2-SI-3.2.10.B	
2-RFV-23-509	RHR HTX A SPLY RLF	2-47E858-1 / E-6	C	ACT	3	2	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-SHV-23-512	HEADER SHUTOFF VALVE	2-47E858-1 / E-6	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
2-RFV-23-516	RHR HTX A TUBE RLF	2-47E858-1 / F-6	C	ACT	3	2	TRV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-23-529	RHR HTX B SPLY RLF	2-47E858-1 / E-4	C	ACT	3	2	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-SHV-23-532	HEADER SHUTOFF VALVE	2-47E858-1 / E-4	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
2-RFV-23-536	RHR HTX B TUBE RLF	2-47E858-1 / F-5	C	ACT	3	2	TRV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-23-549	RHR HTX C SPLY RLF	2-47E858-1 / E-7	C	ACT	3	2	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-SHV-23-552	HEADER SHUTOFF VALVE	2-47E858-1 / F-7	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
2-RFV-23-555	RHR HTX C TUBE RLF	2-47E858-1 / H-6	C	ACT	3	2	TRV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-23-568	RHR HTX D SPLY RLF	2-47E858-1 / E-4	C	ACT	3	2	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-SHV-23-571	HEADER SHUTOFF VALVE	2-47E858-1 / F-4	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
2-RFV-23-574	RHR HTX D TUBE RLF	2-47E858-1 / H-5	C	ACT	3	2	TRV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-CKV-23-579	RHR HTX A INLT CK	2-47E858-1 / E-6	C	ACT	3	16	CK	SA	C	O	N/A	BDC CVO	Q Q	2-SI-4.5.C.1(A) 2-SI-4.5.C.1(A)	
2-CKV-23-580	RHR HTX B INLT CK	2-47E858-1 / E-4	C	ACT	3	16	CK	SA	C	O	N/A	BDC CVO	Q Q	2-SI-4.5.C.1(B) 2-SI-4.5.C.1(B)	
2-CKV-23-581	RHR HTX C INLT CK	2-47E858-1 / E-7	C	ACT	3	16	CK	SA	C	O	N/A	BDC CVO	Q Q	2-SI-4.5.C.1(C) 2-SI-4.5.C.1(C)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-23-582	RHR HTX D INLT CK	2-47E858-1 / E-4	C	ACT	3	16	CK	SA	C	O	N/A	BDC	Q	2-SI-4.5.C.1(D)	
												CVO	Q		
2-SHV-24-706	RCW TO RHR PUMPS A & C SHUTOFF VLV	2-47E844-2 / E-3	B	PASS	3	3	GA	M	C	C	N/A	NTR	NTR		
2-SHV-24-729	RCW TO RHR PUMPS B & D SHUTOFF VLV	2-47E844-2 / F-2	B	PASS	3	3	GA	M	C	C	N/A	NTR	NTR		
2-FCV-43-13	RECIRC CNTMT ISOL	2-47E610-43-1 / H-4	A	ACT	2	0.75	GL	AO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(L)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/43a	
												FSC	Q	2-SR-3.6.1.3.5(43)	
												STC	Q	2-SR-3.6.1.3.5(43)	
2-FCV-43-14	RECIRC CNTMT ISOL	2-47E610-43-1 / G-4	A	ACT	2	0.75	GL	AO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(L)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/43a	
												FSC	Q	2-SR-3.6.1.3.5(43)	
												STC	Q	2-SR-3.6.1.3.5(43)	
2-FSV-43-40	PASS CNTMT ISOL	2-47E867-3 / F-2	A	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(L)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/43d	
												FSC	Q	2-SR-3.6.1.3.5(43)	
												STC	Q	2-SR-3.6.1.3.5(43)	
2-FSV-43-42	PASS CNTMT ISOL	2-47E867-3 / F-2	A	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(L)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/43d	
												FSC	Q	2-SR-3.6.1.3.5(43)	
												STC	Q	2-SR-3.6.1.3.5(43)	
2-FSV-43-50	PASS CNTMT ISOL	2-47E867-3 / G-2	B	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(L)	
												FSC	Q	2-SR-3.6.1.3.5(43)	
												STC	Q	2-SR-3.6.1.3.5(43)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FSV-43-56	PASS CNTMT ISOL	2-47E867-3 / G-2	B	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(L)	
												FSC	Q	2-SR-3.6.1.3.5(43)	
												STC	Q	2-SR-3.6.1.3.5(43)	
2-FSV-43-70	PASS CNTMT ISOL	2-47E867-3 / B-2	A	ACT	1	0.5	GL	SO	O/C	C	C	RPI	2Y	2-SR-3.3.3.1.4(L)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/43f	
												FSC	Q	2-SR-3.6.1.3.5(43)	
												STC	Q	2-SR-3.6.1.3.5(43)	
2-SMV-43-622	RHR HTX A DISCH GRAB	2-47E610-43-1 / D-8	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
2-SMV-43-623	RHR HTX B DISCH GRAB	2-47E610-43-1 / D-8	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
2-SMV-43-624	RHR HTX C DISCH GRAB	2-47E610-43-1 / D-8	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
2-SMV-43-625	RHR HTX D DISCH GRAB	2-47E610-43-1 / D-8	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
2-ISV-43-631	MAN-43-15 SAMPLE INLET	2-47E610-43-1 / D-1	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-ISV-43-631A	SAMPLE BOMB FOR NON-CONDENSIBLES	2-47E610-43-1 / D-1	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-ISV-43-632	MS BEFORE SV GRAB	2-47E610-43-1 / D-1	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-FCV-63-8A	SLC PMP A INJ	2-47E854-1 / F-6	D	ACT	2	1.5	EX	EXP	C	O	N/A	EXP	EXP	2-SR-3.1.7.7	
2-FCV-63-8B	SLC PMP B INJ	2-47E854-1 / E-6	D	ACT	2	1.5	EX	EXP	C	O	N/A	EXP	EXP	2-SR-3.1.7.7	
2-SHV-63-502	SLC SYS SUCTION DEMIN WATER SHUTOFF VLV	2-47E854-1 / F-2	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-SHV-63-509	2A SLC PMP SUCTION DEMIN WATER SHUTOFF VLV	2-47E854-1 / D-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-SHV-63-511	2B SLC PMP SUCTION DEMIN WATER SHUTOFF VLV	2-47E854-1 / D-5	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-RFV-63-512	SLC PMP A RLF	2-47E854-1 / E-5	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-RFV-63-513	SLC PMP B RLF	2-47E854-1 / E-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-CKV-63-514	SLC PMP A DISCH CK	2-47E854-1 / E-5	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-4.4.A.1(A) 2-SR-3.1.7.7	
2-CKV-63-516	SLC PMP B DISCH CK	2-47E854-1 / E-4	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-4.4.A.1(B) 2-SR-3.1.7.7	
2-CKV-63-525	SLC CNTMT ISOL	2-47E854-1 / E-7	C	ACT	1	1.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.1.7.7	
2-CKV-63-526	SLC CNTMT ISOL	2-47E854-1 / D-7	C	ACT	1	1.5	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.1.7.7	
2-FCV-67-50	EECW N HDR TO RBCCW HTX	2-47E859-1 / G-4	B	ACT	3	8	BF	AO	O/C	C	C	RPI FSC STC	2Y Q Q	2-SI-3.2.10.C 0-SI-4.5.C.1(1) 0-SI-4.5.C.1(1)	
2-FCV-67-51	EECW S HDR TO RBCCW HTX	2-47E859-1 / C-5	B	ACT	3	8	BF	AO	O/C	C	C	RPI FSC STC	2Y Q Q	2-SI-3.2.10.C 0-SI-4.5.C.1(1) 0-SI-4.5.C.1(1)	
2-CKV-67-541	CS I RM CLR S HDR SPLY	2-47E859-1 / E-8	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(CS I)	
2-CKV-67-542	CS I RM CLR S HDR SPLY	2-47E859-1 / E-8	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(CS I)	
2-CKV-67-558	RHR I RM CLR S HDR SPLY	2-47E859-1 / B-7	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(RHR I)	
2-CKV-67-559	RHR I RM CLR S HDR SPLY	2-47E859-1 / C-7	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(RHR I)	
2-CKV-67-584	CS II RM CLR S HDR SPLY	2-47E859-1 / F-5	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(CS II)	
2-CKV-67-585	CS II RM CLR S HDR SPLY	2-47E859-1 / F-5	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(CS II)	
2-CKV-67-600	RHR II RM CLR S HDR SPLY	2-47E859-1 / C-3	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(RHR II)	
2-CKV-67-601	RHR II RM CLR S HDR SPLY	2-47E859-1 / C-3	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(RHR II)	
2-CKV-67-638	RHR I RM CLR N HDR SPLY	2-47E859-1 / F-7	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(RHR I)	

Appendix B - Valve Test Plan

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-67-639	RHR I RM CLR N HDR SPLY	2-47E859-1 / C-7	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(RHR I)	
2-CKV-67-648	CS I RM CLR N HDR SPLY	2-47E859-1 / F-6	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(CS I)	
2-CKV-67-649	CS I RM CLR N HDR SPLY	2-47E859-1 / F-6	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(CS I)	
2-CKV-67-656	CS II RM CLR N HDR SPLY	2-47E859-1 / F-4	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(CS II)	
2-CKV-67-657	CS II RM CLR N HDR SPLY	2-47E859-1 / F-4	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(CS II)	
2-CKV-67-659	RHR II RM CLR N HDR SPLY	2-47E859-1 / F-3	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(RHR II)	
2-CKV-67-660	RHR II RM CLR N HDR SPLY	2-47E859-1 / C-3	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.4(RHR II)	
2-FCV-68-3	RECIRC PMP A DISCH	2-47E817-1 / E-6	B	ACT	1	28	GA	MO	O	C	FAI	RPI STC	2Y CSD	2-SI-3.2.10.D	DTJ-5
2-ECKV-68-5A	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-5B	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-7A	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-7B	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / E-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-68-7BA	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-8	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-10	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-11	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-13	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-5	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-15A	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-15B	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / E-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-ECKV-68-15BA	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-18	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-19	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-21	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-5	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-22	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-25A	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	
2-ECKV-68-25B	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-26	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-28	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-29	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-30	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-38A	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-68-38B	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-39	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-40	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-42	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-43	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-52	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / E-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-ECKV-68-63	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-8	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-64	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-8	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-ECKV-68-65A	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-8	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-65B	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-8	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-75	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-76	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-FCV-68-79	RECIRC PMP B DISCH	2-47E817-1 / D-4	B	ACT	1	28	GA	MO	O	C	FAI	RPI STC	2Y CSD	2-SI-3.2.10.D	 DTJ-5
2-ECKV-68-81A	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-81B	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-82A	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-82B	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
2-ECKV-68-93	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-8	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-68-94	VALVE, CHECK, EXCESSIVE FLOW	2-47E817-1 / C-8	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	
2-CKV-68-508	RECIRC PMP SEAL ISOL	2-47E817-1 / B-6	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ CM	AppJ CM	2-SI-4.7.A.2.g-3/68a 2-SI-3.2.3 2-SI-3.2.31 2-SI-4.7.A.2.g-3/68a	
2-CKV-68-523	RECIRC PMP SEAL ISOL	2-47E817-1 / B-3	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ CM	AppJ CM	2-SI-4.7.A.2.g-3/68b 2-SI-3.2.3 2-SI-3.2.31 2-SI-4.7.A.2.g-3/68b	
2-CKV-68-550	RECIRC PMP SEAL ISOL	2-47E817-1 / B-7	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ CM	AppJ CM	2-SI-4.7.A.2.g-3/68a 2-SI-3.2.3 2-SI-3.2.31 2-SI-4.7.A.2.g-3/68a	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-68-555	RECIRC PMP SEAL ISOL	2-47E817-1 / B-3	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/68b	
												CM	CM	2-SI-3.2.3 2-SI-3.2.31 2-SI-4.7.A.2.g-3/68b	
2-FCV-69-1	RWCU INBD CNTMT ISOL	2-47E810-1 / G-7	A	ACT	1	6	GA	MO	O	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(E)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/69	
												STC	Q	2-SR-3.6.1.3.5(RWCU)	
2-FCV-69-2	RWCU OUTBD CNTMT ISOL	2-47E810-1 / G-6	A	ACT	1	6	GA	MO	O	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(E)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/69	
												STC	Q	2-SR-3.6.1.3.5(RWCU)	
2-CKV-69-630	RWCU TO FDWTR ISOL	2-47E810-1 / E-6	A/C	ACT	1	4	CK	SA	O	C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/3b	
												CM	CM	2-SI-3.2.3 2-SI-3.2.31 2-SI-4.7.A.2.g-3/3b	
2-FCV-70-47	RBCCW RTN CNTMT ISOL	2-47E822-1 / G-4	A	ACT	2	8	GA	MO	O	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(N)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/70	
												STC	RO	2-SR-3.6.1.3.5(RBCCW)	DTJ-6
2-CKV-70-506	RBCCW SPLY CNTMT ISOL	2-47E822-1 / F-4	A/C	ACT	2	8	CK	SA	O	C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/70	
												CM	CM	2-SI-3.2.3 2-SI-3.2.31 2-SI-4.7.A.2.g-3/70	
2-ECKV-71-1AA	EXCESS FLOW CHECK VLV TO PDT-71-1A L	2-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-71-1AB	EXCESS FLOW CHECK VLV TO PDT-71-1AH	2-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-71-1BA	EXCESS FLOW CHECK VLV TO PDT-71-1BL	2-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	
2-ECKV-71-1BB	EXCESS FLOW CHECK VLV TO PDT-71-1BH	2-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(4)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-71-2	RCIC STM LN INBD CNTMT ISOL	2-47E813-1 / G-7	A	ACT	1	3	GA	MO	O	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(F)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/71a	
												STC	Q	2-SR-3.6.1.3.5(RCIC)	
												STO	Q	2-SR-3.6.1.3.5(RCIC)	
2-FCV-71-3	RCIC STM LN OUTBD CNTMT ISOL	2-47E813-1 / G-6	A	ACT	1	3	GA	MO	O	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(F)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/71a	
												STC	Q	2-SR-3.6.1.3.5(RCIC)	
												STO	Q	2-SR-3.6.1.3.5(RCIC)	
2-FCV-71-6A	RCIC STM LN TO COND DRN	2-47E813-1 / E-1	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		
2-FCV-71-6B	RCIC STM LN TO COND DRN	2-47E813-1 / E-1	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		
2-FCV-71-8	RCIC TRB STM SPLY	2-47E813-1 / F-1	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(F)	
												STC	Q	2-SR-3.6.1.3.5(RCIC)	
												STO	Q	2-SR-3.6.1.3.5(RCIC)	
2-RPD-71-11A	RCIC TRB EXH RP DISC	2-47E813-1 / E-3	D	ACT	2	8	RD	SA	C	O/C	N/A	RD	RV	2-SI-3.2.19	
2-HCV-71-14	RCIC TRB EXHAUST VLV	2-47E813-1 / D-6	A/C	ACT	2	8	SCK	SA	C	O/C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/71b	
												CM	CM	2-SI-3.2.3 2-SR-3.5.3.3 2-SR-3.5.3.3(COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-71-17	PSC TO RCIC INBD CNTMT ISOL	2-47E813-1 / A-6	B	ACT	2	6	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	2-SR-3.3.3.1.4(F)	
2-FCV-71-18	PSC TO RCIC OUTBD CNTMT ISOL	2-47E813-1 / G-4	B	ACT	2	6	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	2-SR-3.3.3.1.4(F)	
2-RFV-71-19	RCIC PMP SUCT RLF	2-47E813-1 / G-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-FCV-71-25	RCIC LUBE OIL CLG WTR SPLY	2-47E813-1 / B-4	B	ACT	2	2	GL	MO	O	O/C	FAI	RPI STC STO	2Y Q Q	2-SR-3.3.3.1.4(F) 2-SR-3.6.1.3.5(RCIC) 2-SR-3.6.1.3.5(RCIC)	
2-SHV-71-32	RCIC COND VC PMP DISCH	2-47E813-1 / C-6	C	ACT	2	2	SCK	SA	O	C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(RCIC CM)	
2-FCV-71-34	RCIC PMP MN FL	2-47E813-1 / E-5	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	2-SR-3.3.3.1.4(F) 2-SR-3.6.1.3.5(RCIC) 2-SR-3.6.1.3.5(RCIC)	
2-FCV-71-37	RCIC INJ OUTBD ISOL	2-47E813-1 / F-5	B	PASS	2	6	GA	MO	O	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(F)	
2-FCV-71-38	RCIC PMP TST RTN TO CST	2-47E813-1 / G-5	B	ACT	2	4	GL	MO	O/C	C	FAI	RPI STC	2Y Q	2-SR-3.3.3.1.4(F) 2-SR-3.6.1.3.5(RCIC)	
2-FCV-71-39	RCIC INJ INBD ISOL	2-47E813-1 / F-6	B	ACT	2	6	GA	MO	O/C	O	FAI	RPI STO	2Y Q	2-SR-3.3.3.1.4(F) 2-SR-3.6.1.3.5(RCIC)	
2-FCV-71-40	RCIC TSTABLE CK	2-47E813-1 / F-6	A/C	ACT	1	6	TCK	SA	C	O/C	N/A	RPI LTJ CM	2Y AppJ CM	2-SR-3.6.1.3.5(RCIC RO)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-71-59	RCIC TURB EXHAUST VACUUM RELIEF	2-47E813-1 / D-7	B	PASS	2	3	GA	MO	O	O	FAI	NTR	NTR		
2-CKV-71-499	CST/RCIC PMP INLT	2-47E813-1 / G-4	C	ACT	2	6	CK	SA	O/C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.3.3 2-SR-3.5.3.3(COMP)	
2-CKV-71-508	PSC/RCIC PMP INLT	2-47E813-1 / B-5	C	ACT	2	6	CK	SA	C	O	N/A	CM	CM	2-SI-3.2.3	
2-RFV-71-543	RCIC COND RLF	2-47E813-1 / B-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-CKV-71-547	RCIC PMP MN FL CK	2-47E813-1 / E-5	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.3.3 2-SR-3.5.3.3(COMP) 2-SR-3.6.1.3.5(RCIC CM)	
2-SHV-71-565	AUX STEAM SPLY SHUTOFF VLV	2-47E813-1 / H-2	B	PASS	2	3	GA	M	C	C	N/A	NTR	NTR		
2-CKV-71-580	RCIC TRB EXH CK	2-47E813-1 / D-6	A/C	ACT	2	10	CK	SA	C	O/C	N/A	LTJ CM	AppJ CM	2-SI-4.7.A.2.g-3/71b 2-SI-3.2.3 2-SI-4.7.A.2.g-3/71b 2-SR-3.5.3.3 2-SR-3.5.3.3(COMP) 2-SR-3.6.1.3.5(RCIC CM)	
2-CKV-71-589	RCIC COND PMP CK	2-47E813-1 / B-3	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.3.3 2-SR-3.5.3.3(COMP)	
2-CKV-71-592	RCIC VC PMP DISCH	2-47E813-1 / C-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(RCIC CM)	
2-CKV-71-597	RCIC TRB EXH VC RLF	2-47E813-1 / D-6	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(RCIC CM)	
2-CKV-71-598	RCIC TRB EXH VC RLF	2-47E813-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(RCIC CM)	
2-CKV-71-599	RCIC TRB EXH VC RLF	2-47E813-1 / D-6	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(RCIC CM)	
2-CKV-71-600	RCIC TRB EXH VC RLF	2-47E813-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(RCIC CM)	
2-ECKV-73-1AA	EXCESS FLOW CHECK VLV TO PDT-73-1A	2-47E812-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	
2-ECKV-73-1AB	EXCESS FLOW CHECK VLV TO PDT-73-1A	2-47E812-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(3)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-73-2	HPCI STM LN INBD CNTMT ISOL	2-47E812-1 / G-7	A	ACT	1	10	GA	MO	O	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/73a	
												STC	Q	2-SR-3.6.1.3.5(HPCI)	
												STO	Q	2-SR-3.6.1.3.5(HPCI)	
2-FCV-73-3	HPCI STM LN OUTBD CNTMT ISOL	2-47E812-1 / G-6	A	ACT	1	10	GA	MO	O	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/73a	
												STC	Q	2-SR-3.6.1.3.5(HPCI)	
												STO	Q	2-SR-3.6.1.3.5(HPCI)	
2-FCV-73-6A	HPCI STM LN TO COND DRN	2-47E812-1 / E-2	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		
2-FCV-73-6B	HPCI STM LN TO COND DRN	2-47E812-1 / E-2	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		
2-FCV-73-16	HPCI TRB STM SPLY VLV	2-47E812-1 / G-3	B	ACT	2	10	GA	MO	C	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												STO	Q	2-SR-3.6.1.3.5(HPCI)	
2-ISV-73-23	HPCI TRB EXHAUST VLV	2-47E812-1 / E-7	A/C	ACT	2	16	SCK	SA	C	O/C	N/A	LTJ	AppJ	2-SI-4.7.A.2.g-3/73b	
												CM	CM	2-SI-3.2.3 2-SR-3.5.1.7 2-SR-3.5.1.7(COMP)	
2-ISV-73-24	HPCI TRB EXH COND POT DISCH	2-47E812-1 / D-6	C	PASS	2	2	SCK	SA	C	C	N/A	NTR	NTR		

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VALVE ID.	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-73-26	PSC TO HPCI INBD ISOL	2-47E812-1 / B-6	B	ACT	2	16	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												STC	Q	2-SR-3.6.1.3.5(HPCI)	
												STO	Q	2-SR-3.6.1.3.5(HPCI)	
2-FCV-73-27	PSC TO HPCI OUTBD ISOL	2-47E812-1 / G-5	B	ACT	2	16	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												STC	Q	2-SR-3.6.1.3.5(HPCI)	
												STO	Q	2-SR-3.6.1.3.5(HPCI)	
2-FCV-73-30	HPCI PMP MN FL	2-47E812-1 / D-5	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												STC	Q	2-SR-3.6.1.3.5(HPCI)	
												STO	Q	2-SR-3.6.1.3.5(HPCI)	
2-FCV-73-34	HPCI INJ OUTBD ISOL	2-47E812-1 / F-6	B	PASS	2	14	GA	MO	O/C	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
2-FCV-73-35	HPCI PMP TST RTN TO CST	2-47E812-1 / F-6	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												STC	Q	2-SR-3.6.1.3.5(HPCI)	
2-FCV-73-40	HPCI PMP SUCTION ISOL	2-47E812-1 / H-5	B	ACT	2	14	GA	MO	O	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												STC	Q	2-SR-3.6.1.3.5(HPCI)	
												STO	Q	2-SR-3.6.1.3.5(HPCI)	
2-FCV-73-44	HPCI INJ INBD ISOL	2-47E812-1 / F-6	B	ACT	2	14	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(G)	
												STC	Q	2-SR-3.6.1.3.5(HPCI)	
												STO	Q	2-SR-3.6.1.3.5(HPCI)	
2-FCV-73-45	HPCI TSTABLE CK	2-47E812-1 / E-6	A/C	ACT	1	14	TCK	SA	C	O/C	N/A	RPI	2Y	2-SR-3.6.1.3.5(HPCI RO)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/3a	
												CM	CM		
2-FCV-73-64	MOTOR ACTUATOR FOR HPCI TURB EXH CNTVALVE	2-47E812-1 / D-8	B	PASS	2	3	GA	MO	O	O	FAI	NTR	NTR		

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									NORM	SAFE	FAIL				
2-FCV-73-81	2-FCV-73-3 BYPASS	2-47E812-1 / G-6	A	ACT	1	1	GA	MO	O	C	FAI	RPI LTJ STC	2Y AppJ Q	2-SR-3.3.3.1.4(G) 2-SI-4.7.A.2.g-3/73a 2-SR-3.6.1.3.5(HPCI)	
2-CKV-73-505	CST/HPCI PMP INLT	2-47E812-1 / H-5	C	ACT	2	14	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.7 2-SR-3.5.1.7(COMP)	
2-RFV-73-506	HPCI PMP SUCT RLF	2-47E812-1 / G-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-CKV-73-517	PSC/HPCI PMP INLT	2-47E812-1 / B-6	C	ACT	2	16	CK	SA	C	O/C	N/A	CM	CM	2-SR-3.6.1.3.5(HPCI)	
2-CKV-73-559	HPCI PMP MN FL CHECK	2-47E812-1 / D-5	C	ACT	2	4	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.7 2-SR-3.5.1.7(COMP) 2-SR-3.6.1.3.5(HPCI CM)	
2-RFV-73-574	HPCI COND RLF	2-47E812-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-SHV-73-587	AUX STEAM SUPPLY SHUTOFF VLV	2-47E812-1 / G-2	B	PASS	2	8	GA	M	C	C	N/A	NTR	NTR		
2-CKV-73-603	HPCI TRB EXH CHECK	2-47E812-1 / D-7	A/C	ACT	2	16	CK	SA	C	O/C	N/A	LTJ CM	AppJ CM	2-SI-4.7.A.2.g-3/73b 2-SI-3.2.3 2-SI-4.7.A.2.g-3/73b 2-SR-3.5.1.7 2-SR-3.5.1.7(COMP) 2-SR-3.6.1.3.5(HPCI CM)	
2-SHV-73-607	TURB EXHAUST STEAM TRAP INLET SHUTOFF VLV	2-47E812-1 / D-4	B	PASS	2		GL	M	C	C	N/A	NTR	NTR		
2-CKV-73-609	HPCI TRB EXH DRN CHECK	2-47E812-1 / D-6	C	PASS	2	2	CK	SA	C	C	N/A	NTR	NTR		
2-CKV-73-625	HPCI GLAND SL RTN	2-47E812-1 / B-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.7 2-SR-3.5.1.7(COMP)	
2-CKV-73-633	HPCI TRB EXH VC RLF	2-47E812-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(HPCI CM)	
2-CKV-73-634	HPCI TRB EXH VC RLF	2-47E812-1 / D-8	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(HPCI CM)	
2-CKV-73-635	HPCI TRB EXH VC RLF	2-47E812-1 / E-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(HPCI CM)	

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									NORM	SAFE	FAIL				
2-CKV-73-636	HPCI TRB EXH VC RLF	2-47E812-1 / E-8	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.6.1.3.5(HPCI CM)	
2-RPD-73-729	HPCI TRB RP DISC	2-47E812-1 / E-4	D	ACT	2	16	RD	SA	C	O/C	N/A	RD	RV	2-SI-3.2.19	
2-FCV-74-1	RHR PMP A PSC SUCT	2-47E811-1 / B-5	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q	2-SR-3.6.1.3.5(RHR I)	
												STO	Q	2-SR-3.6.1.3.5(RHR I)	
2-FCV-74-2	RHR PMP A SD CLG SUCT	2-47E811-1 / C-6	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		
2-FCV-74-7	RHR LP I MN FL	2-47E811-1 / E-6	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q	2-SR-3.6.1.3.5(RHR I)	
												STO	Q	2-SR-3.6.1.3.5(RHR I)	
2-SHV-74-11	RHR PUMP 2A CNDS SUCT SUPPLY SHUTOFF VALVE	2-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(H I)	
2-FCV-74-12	RHR PMP C PSC SUCT	2-47E811-1 / D-5	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q	2-SR-3.6.1.3.5(RHR I)	
												STO	Q	2-SR-3.6.1.3.5(RHR I)	
2-FCV-74-13	RHR PMP C SD CLG SUCT	2-47E811-1 / D-6	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		
2-SHV-74-23	RHR PUMP 2C CNDS SUCT SUPPLY SHUTOFF VALVE	2-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(H I)	
2-FCV-74-24	RHR PMP B PSC SUCT	2-47E811-1 / B-4	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q	2-SR-3.6.1.3.5(RHR II)	
												STO	Q	2-SR-3.6.1.3.5(RHR II)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-74-25	RHR PMP B SD CLG SUCT	2-47E811-1 / C-4	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		
2-FCV-74-30	RHR LP II MN FL	2-47E811-1 / E-3	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q	2-SR-3.6.1.3.5(RHR II)	
												STO	Q	2-SR-3.6.1.3.5(RHR II)	
2-SHV-74-34	RHR PUMP 2B CNDS SUCT SUPPLY SHUTOFF VALVE	2-47E811-1 / B-4	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(H II)	
2-FCV-74-35	RHR PMP D PSC SUCT	2-47E811-1 / D-4	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q	2-SR-3.6.1.3.5(RHR II)	
												STO	Q	2-SR-3.6.1.3.5(RHR II)	
2-FCV-74-36	RHR PMP D SD CLG SUCT	2-47E811-1 / D-4	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		
2-SHV-74-45	RHR PUMP 2D CNDS SUCT SUPPLY SHUTOFF VALVE	2-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(H II)	
2-FCV-74-46	RHR SYS I-II CROSSTIE VLV	2-47E811-1 / D-7	B	PASS	2	24	GA	MO	C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(HCT)	
2-FCV-74-47	RHR SD CLG OUTBD ISOL	2-47E811-1 / E-5	A	ACT	1	20	GA	MO	C	C	FAI	LTP	2Y	2-SI-3.2.74(SDC)	PIV
												RPI	2Y		
												LTJ	AppJ		
												STC	CSD	2-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	2-SR-3.6.1.3.5(RHR CSD)	DTJ-7

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									NORM	SAFE	FAIL				
2-FCV-74-48	RHR SD CLG INBD ISOL	2-47E811-1 / F-5	A	ACT	1	20	GA	MO	C	C	FAI	LTP	2Y	2-SI-3.2.74(SDC)	PIV
												RPI	2Y		
												LTJ	AppJ		
												STC	CSD	2-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	2-SR-3.6.1.3.5(RHR CSD)	DTJ-7
2-FCV-74-52	RHR LP I THROTTLE	2-47E811-1 / F-7	B	ACT	2	24	ANG	MO	O/C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q		
												STO	Q	2-SR-3.6.1.3.5(RHR I)	
2-FCV-74-53	RHR LP I INJ	2-47E811-1 / F-6	A	ACT	1	24	GA	MO	C	O/C	FAI	LTP	2Y	2-SI-3.2.74(RHR I)	, PIV
												RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	CSD	2-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	2-SR-3.6.1.3.5(RHR CSD)	DTJ-7
2-CKV-74-54	RHR SYSTEM I CHECK VAVLE	2-47E811-1 / F-6	A/C	ACT	1	24	CK	SA	C	O/C	N/A	LTP	2Y	2-SI-3.2.74(RHR I)	PIV,
												CVC	RO	2-SI-3.2.74(RHR I)	DTJ-2
												CVO	RO	2-SI-3.2.21(I)	DTJ-2
2-FCV-74-57	RHR LP I PSC RTN	2-47E811-1 / G-8	B	ACT	2	18	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q	2-SR-3.6.1.3.5(RHR I)	
												STO	Q	2-SR-3.6.1.3.5(RHR I)	
2-FCV-74-58	RHR LP I PSC SPRAY	2-47E811-1 / F-8	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q	2-SR-3.6.1.3.5(RHR I)	
												STO	Q	2-SR-3.6.1.3.5(RHR I)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-74-59	RHR LP I PMP TST RTN	2-47E811-1 / F-8	B	ACT	2	12	GL	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q	2-SR-3.6.1.3.5(RHR I)	
												STO	Q	2-SR-3.6.1.3.5(RHR I)	
2-FCV-74-60	RHR LP I CNTMT SPRAY OUTBD ISOL	2-47E811-1 / G-6	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q	2-SR-3.6.1.3.5(RHR I)	
												STO	Q	2-SR-3.6.1.3.5(RHR I)	
2-FCV-74-61	RHR LP I CNTMT SPRAY INBD ISOL	2-47E811-1 / G-5	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
												STC	Q	2-SR-3.6.1.3.5(RHR I)	
												STO	Q	2-SR-3.6.1.3.5(RHR I)	
2-FCV-74-66	RHR LP II THROTTLE	2-47E811-1 / F-3	B	ACT	2	24	ANG	MO	O/C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q		
												STO	Q	2-SR-3.6.1.3.5(RHR II)	
2-FCV-74-67	RHR LP II INJ	2-47E811-1 / F-3	A	ACT	1	24	GA	MO	C	O/C	FAI	LTP	2Y	2-SI-3.2.74(RHR II)	; PIV
												RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	CSD	2-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	2-SR-3.6.1.3.5(RHR CSD)	DTJ-7
2-CKV-74-68	RHR SYSTEM II CHECK VALVE	2-47E811-1 / F-4	A/C	ACT	1	24	CK	SA	C	O/C	N/A	LTP	2Y	2-SI-3.2.74(RHR II)	PIV,
												CVC	RO	2-SI-3.2.74(RHR II)	DTJ-2
												CVO	RO	2-SI-3.2.21(II)	DTJ-2
2-FCV-74-71	RHR LP II PSC RTN	2-47E811-1 / G-2	B	ACT	2	18	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q	2-SR-3.6.1.3.5(RHR II)	
												STO	Q	2-SR-3.6.1.3.5(RHR II)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-74-72	RHR LP II PSC SPRAY	2-47E811-1 / F-2	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q	2-SR-3.6.1.3.5(RHR II)	
												STO	Q	2-SR-3.6.1.3.5(RHR II)	
2-FCV-74-73	RHR LP II PMP TST RTN	2-47E811-1 / F-2	B	ACT	2	12	GL	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q	2-SR-3.6.1.3.5(RHR II)	
												STO	Q	2-SR-3.6.1.3.5(RHR II)	
2-FCV-74-74	RHR LP II CNTMT SPRAY OUTBD ISOL	2-47E811-1 / G-4	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q	2-SR-3.6.1.3.5(RHR II)	
												STO	Q	2-SR-3.6.1.3.5(RHR II)	
2-FCV-74-75	RHR LP II CNTMT SPRAY INBD ISOL	2-47E811-1 / G-5	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
												STC	Q	2-SR-3.6.1.3.5(RHR II)	
												STO	Q	2-SR-3.6.1.3.5(RHR II)	
2-SHV-74-91	RHR SD CLG SUPPLY TO FUEL POOL CLG SYS SOV	2-47E811-1 / D-6	B	PASS	2	8	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(HCT)	
2-FCV-74-96	RHR PMP A SUCT XTIE	2-47E811-1 / C-5	B	PASS	2	14	GA	MO	C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
2-FCV-74-97	RHR PMP C SUCT XTIE	2-47E811-1 / C-5	B	PASS	2	14	GA	MO	C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
2-FCV-74-98	RHR PMP B SUCT XTIE	2-47E811-1 / C-4	B	PASS	2	14	GA	MO	C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
2-FCV-74-99	RHR PMP D SUCT XTIE	2-47E811-1 / C-4	B	PASS	2	14	GA	MO	C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
2-FCV-74-100	RHR HTX A-C XTIE TO U1 B-D RHR HTX	2-47E811-1 / C-8	B	PASS	2	10	GA	MO	C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H I)	
2-FCV-74-101	RHR HTX B-D DISCH XTIE	2-47E811-1 / C-1	B	PASS	2	10	GA	MO	C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(H II)	
2-SMV-74-226	RHR PMP SUCT SMPL VLV	2-47E811-1 / C-5	B	PASS	2	0.25	GL	M	LC	C	N/A	NTR	NTR		
2-SMV-74-227	RHR PMP SUCT SMPL VLV	2-47E811-1 / C-5	B	PASS	2	0.25	GL	M	LC	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-RFV-74-509A	RHR PMP A SUCT RLF	2-47E811-1 / B-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-74-509B	RHR PMP B SUCT RLF	2-47E811-1 / C-3	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-74-509C	RHR PMP C SUCT RLF	2-47E811-1 / D-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-74-509D	RHR PMP D SUCT RLF	2-47E811-1 / D-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-CKV-74-559A	RHR PMP A DISCH CK	2-47E811-1 / B-7	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	2-SR-3.5.1.6(RHR I) 2-SR-3.5.1.6(RHR I-COMP) 2-SR-3.5.1.6(RHR I) 2-SR-3.5.1.6(RHR I-COMP)	
2-CKV-74-559B	RHR PMP B DISCH CK	2-47E811-1 / B-3	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	2-SR-3.5.1.6(RHR II) 2-SR-3.5.1.6(RHR II-COMP) 2-SR-3.5.1.6(RHR II) 2-SR-3.5.1.6(RHR II-COMP)	
2-CKV-74-559C	RHR PMP C DISCH CK	2-47E811-1 / D-7	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	2-SR-3.5.1.6(RHR I) 2-SR-3.5.1.6(RHR I-COMP) 2-SR-3.5.1.6(RHR I) 2-SR-3.5.1.6(RHR I-COMP)	
2-CKV-74-559D	RHR PMP D DISCH CK	2-47E811-1 / D-3	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	2-SR-3.5.1.6(RHR II) 2-SR-3.5.1.6(RHR II-COMP) 2-SR-3.5.1.6(RHR II) 2-SR-3.5.1.6(RHR II-COMP)	
2-CKV-74-560A	RHR PMP A MN FLW	2-47E811-1 / B-6	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.6(RHR I) 2-SR-3.5.1.6(RHR I-COMP)	
2-CKV-74-560B	RHR PMP B MN FLW	2-47E811-1 / B-3	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.6(RHR II) 2-SR-3.5.1.6(RHR II-COMP)	
2-CKV-74-560C	RHR PMP C MN FLW	2-47E811-1 / D-6	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.6(RHR I) 2-SR-3.5.1.6(RHR I-COMP)	
2-CKV-74-560D	RHR PMP D MN FLW	2-47E811-1 / D-3	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.6(RHR II) 2-SR-3.5.1.6(RHR II-COMP)	
2-RFV-74-578A	RHR HTX A RLF	2-47E811-1 / B-7	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-74-578B	RHR HTX B RLF	2-47E811-1 / B-2	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-74-578C	RHR HTX C RLF	2-47E811-1 / C-7	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-RFV-74-578D	RHR HTX D RLF	2-47E811-1 / D-2	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-74-587A	RHR LP I DISCH RLF	2-47E811-1 / H-8	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-74-587B	RHR LP II DISCH RLF	2-47E811-1 / G-3	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-74-659	RHR SDC SPLY RLF	2-47E811-1 / E-5	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-CKV-74-661	RHR TRCV	2-47E811-1 / F-5	A/C	ACT	1	0.75	CK	SA	C	O/C	N/A	LTP LTJ CVC CVO	2Y AppJ RO RO	2-SI-3.2.74(SDC) 2-SI-3.2.74(SDC) 2-SI-3.2.74(SDC)	PIV : Series Pair DTJ-2 DTJ-2
2-CKV-74-662	RHR TRCV	2-47E811-1 / F-5	A/C	ACT	1	0.75	CK	SA	C	O/C	N/A	LTP LTJ CVC CVO	2Y AppJ RO RO	2-SI-3.2.74(SDC) 2-SI-3.2.74(SDC) 2-SI-3.2.74(SDC)	PIV : Series Pair DTJ-2 DTJ-2
2-SHV-74-670	CNDS FLUSH AND FILL TO SDC SPLY SHUTOFFF VLV	2-47E811-1 / E-5	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
2-SHV-74-675	RHR SYS II CNDS FLUSH & FILL SOV	2-47E811-1 / H-6	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
2-SHV-74-681A	RHR SYS I/SD CLG RTN CNDS FLUSH & FILL SOV	2-47E811-1 / F-7	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
2-SHV-74-681B	RHR SYS II/SD CLG RTN CNDS FLUSH & FILL SOV	2-47E811-1 / F-3	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
2-SHV-74-699	RHR SYS I CNDS FLUSH & FILL SOV	2-47E811-1 / H-3	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
2-BYV-74-704	RHR SYS I HEAD SPRAY CNDS FLUSH & FILL BYP VLV	2-47E811-1 / H-3	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-DRV-74-722	PSC DRAIN ISOLATION	2-47E811-1 / E-4	B	PASS	2	8	GA	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-74-792	RHR LP II KP FILL CK	2-47E811-1 / H-7	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.14 2-SI-3.2.14(II) 2-SI-3.2.31	
2-CKV-74-802	RHR LP I KP FILL CK	2-47E811-1 / H-3	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.14(I) 2-SI-3.2.31	
2-CKV-74-803	RHR LP I KP FILL CK	2-47E811-1 / H-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.14(I) 2-SI-3.2.31	
2-CKV-74-804	RHR LP II KP FILL CK	2-47E811-1 / H-6	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.14(II) 2-SI-3.2.31	
2-BYV-74-828	CNDS FLUSH & FILL TO DW SPRAY BYPASS VLV	2-47E811-1 / G-7	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
2-SHV-75-3	CS PMP 2A CNDS SUCT SHUTOFF VALVE	2-47E814-1 / A-5	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(I/1)	
2-FCV-75-9	CS LP I MN FL	2-47E814-1 / F-5	B	ACT	2	3	GA	MO	O	O/C	FAI	RPI STC STO	2Y Q Q	2-SR-3.3.3.1.4(I/1) 2-SR-3.6.1.3.5(CS I) 2-SR-3.6.1.3.5(CS I)	
2-SHV-75-12	CS PMP 2C CNDS SUCT SHUTOFF VALVE	2-47E814-1 / A-5	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(I/1)	
2-FCV-75-22	CS LP I PMP TST	2-47E814-1 / F-5	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI STC	2Y Q	2-SR-3.3.3.1.4(I/1) 2-SR-3.5.1.6(CS I) 2-SR-3.5.1.6(CS I-COMP)	
2-FCV-75-23	CS LP I INJ	2-47E814-1 / F-6	B	PASS	2	12	GA	MO	O	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(I/1)	
2-FCV-75-25	CS LP I INJ	2-47E814-1 / F-6	A	ACT	1	12	GA	MO	C	O/C	FAI	LTP RPI STC STO	2Y 2Y CSD CSD	2-SI-3.2.75(CS I) 2-SR-3.3.3.1.4(I/1) 2-SR-3.6.1.3.5(CS CSD) 2-SR-3.6.1.3.5(CS CSD)	, PIV DTJ-7 DTJ-7

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-75-26	CS LP I CK	2-47E814-1 / F-7	A/C	ACT	1	12	CK	SA	C	O/C	N/A	LTP	2Y	2-SI-3.2.75(CS I)	PIV,
												CVC	RO	2-SI-3.2.27(I)	DTJ-2
												CVO	RO	2-SI-3.2.75(CS I) 2-SI-3.2.27(I)	DTJ-2
2-ECKV-75-28	EXCESS FLOW CKV TO 2 -PDIS-75-28	2-47E814-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	
2-SHV-75-31	CS PMP 2B CNDS SUCT SHUTOFF VLV	2-47E814-1 / A-3	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(I/2)	
2-FCV-75-37	CS LP II MN FL	2-47E814-1 / E-4	B	ACT	2	3	GA	MO	O	O/C	FAI	RPI	2Y	2-SR-3.3.3.1.4(I/2)	
												STC	Q	2-SR-3.6.1.3.5(CS II)	
												STO	Q	2-SR-3.6.1.3.5(CS II)	
2-SHV-75-40	CS PMP 2D CNDS SUCT SHUTOFF VLV	2-47E814-1 / A-3	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	2-SR-3.3.3.1.4(I/2)	
2-FCV-75-50	CS LP II PMP TST	2-47E814-1 / F-4	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI	2Y	2-SR-3.3.3.1.4(I/2)	
												STC	Q	2-SR-3.5.1.6(CS II) 2-SR-3.5.1.6(CS II-COMP)	
2-FCV-75-51	CS LP II INJ	2-47E814-1 / G-6	B	PASS	2	12	GA	MO	O	O	FAI	RPI	2Y	2-SR-3.3.3.1.4(I/2)	
2-FCV-75-53	CS LP II INJ	2-47E814-1 / G-6	A	ACT	1	12	GA	MO	C	O/C	FAI	LTP	2Y	2-SI-3.2.75(CS II)	, PIV
												RPI	2Y	2-SR-3.3.3.1.4(I/2)	
												STC	CSD	2-SR-3.6.1.3.5(CS CSD)	DTJ-7
												STO	CSD	2-SR-3.6.1.3.5(CS CSD)	DTJ-7
2-CKV-75-54	CS LP II CK	2-47E814-1 / G-7	A/C	ACT	1	12	CK	SA	C	O/C	N/A	LTP	2Y	2-SI-3.2.75(CS II)	PIV,
												CVC	RO	2-SI-3.2.27(II)	DTJ-2
												CVO	RO	2-SI-3.2.75(CS II) 2-SI-3.2.27(II)	DTJ-2
2-ECKV-75-56	EXCESS FLOW CKV TO 2 -PDIS-75-56	2-47E814-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	2-SR-3.6.1.3.8(2)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-75-57	CS DRN PMP A INBD ISOL	2-47E814-1 / B-4	B	ACT	2	3	GL	AO	O	C	C	RPI FSC STC	2Y Q Q	2-SR-3.3.3.1.4(I/1) 2-SR-3.6.1.3.5(CS I) 2-SR-3.6.1.3.5(CS I)	
2-FCV-75-58	CS DRN PMP A OUTBD ISOL	2-47E814-1 / B-5	B	ACT	2	3	GL	AO	O	C	C	RPI FSC STC	2Y Q Q	2-SR-3.3.3.1.4(I/1) 2-SR-3.6.1.3.5(CS I) 2-SR-3.6.1.3.5(CS I)	
2-RFV-75-507A	CS PMP A SUCT RLF	2-47E814-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-75-507B	CS PMP B SUCT RLF	2-47E814-1 / C-2	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-75-507C	CS PMP C SUCT RLF	2-47E814-1 / C-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-75-507D	CS PMP D SUCT RLF	2-47E814-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-CKV-75-537A	CS PMP A DISCH CK	2-47E814-1 / D-5	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC CVO	Q Q	2-SR-3.5.1.6(CS I) 2-SR-3.5.1.6(CS I-COMP) 2-SR-3.5.1.6(CS I) 2-SR-3.5.1.6(CS I-COMP)	
2-CKV-75-537B	CS PMP B DISCH CK	2-47E814-1 / D-3	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC CVO	Q Q	2-SR-3.5.1.6(CS II) 2-SR-3.5.1.6(CS II-COMP) 2-SR-3.5.1.6(CS II) 2-SR-3.5.1.6(CS II-COMP)	
2-CKV-75-537C	CS PMP C DISCH CK	2-47E814-1 / D-6	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC CVO	Q Q	2-SR-3.5.1.6(CS I) 2-SR-3.5.1.6(CS I-COMP) 2-SR-3.5.1.6(CS I) 2-SR-3.5.1.6(CS I-COMP)	
2-CKV-75-537D	CS PMP D DISCH CK	2-47E814-1 / D-4	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC CVO	Q Q	2-SR-3.5.1.6(CS II) 2-SR-3.5.1.6(CS II-COMP) 2-SR-3.5.1.6(CS II) 2-SR-3.5.1.6(CS II-COMP)	
2-RFV-75-543A	CS LP I DISCH RLF	2-47E814-1 / E-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-RFV-75-543B	CS LP II DISCH RLF	2-47E814-1 / E-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	2-SI-3.2.9	
2-CKV-75-570A	CS PMP A MN FL CK	2-47E814-1 / D-5	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.6(CS I) 2-SR-3.5.1.6(CS I-COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-75-570B	CS PMP B MN FL CK	2-47E814-1 / D-2	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.6(CS II) 2-SR-3.5.1.6(CS II-COMP)	
2-CKV-75-570C	CS PMP C MN FL CK	2-47E814-1 / D-6	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.6(CS I) 2-SR-3.5.1.6(CS I-COMP)	
2-CKV-75-570D	CS PMP D MN FL CK	2-47E814-1 / D-4	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	2-SI-3.2.3 2-SR-3.5.1.6(CS II) 2-SR-3.5.1.6(CS II-COMP)	
2-CKV-75-580A	CNDS FLUSH & FILL CHECK VLV	2-47E814-1 / G-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.15(I)	
2-CKV-75-580B	CNDS FLUSH & FILL CHECK VLV	2-47E814-1 / H-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.15(II)	
2-CKV-75-606	CS LP I KP FILL CK	2-47E814-1 / F-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.15(I)	
2-CKV-75-607	CS LP I KP FILL CK	2-47E814-1 / F-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.15(I)	
2-CKV-75-609	CS LP II KP FILL CK	2-47E814-1 / H-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.15(II)	
2-CKV-75-610	CS LP II KP FILL CK	2-47E814-1 / H-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.15(II)	
2-FCV-77-2A	DW FL DRN SMP INBD ISOL	2-47E852-1 / C-4	A	ACT	2	3	BA	AO	O	C	C	RPI LTJ FSC STC	2Y AppJ Q Q	2-SR-3.3.3.1.4(J) 2-SI-4.7.A.2.g-3/77a 2-SR-3.6.1.3.5(77) 2-SR-3.6.1.3.5(77)	
2-FCV-77-2B	DW FL DRN SMP OUTBD ISOL	2-47E852-1 / C-4	A	ACT	2	3	BA	AO	O	C	C	RPI LTJ FSC STC	2Y AppJ Q Q	2-SR-3.3.3.1.4(J) 2-SI-4.7.A.2.g-3/77a 2-SR-3.6.1.3.5(77) 2-SR-3.6.1.3.5(77)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-FCV-77-15A	DW EQ DRN SMP INBD ISOL	2-47E852-2 / D-3	A	ACT	2	3	BA	AO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(J)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/77b	
												FSC	Q	2-SR-3.6.1.3.5(77)	
												STC	Q	2-SR-3.6.1.3.5(77)	
2-FCV-77-15B	DW EQ DRN SMP OUTBD ISOL	2-47E852-2 / D-3	A	ACT	2	3	BA	AO	O	C	C	RPI	2Y	2-SR-3.3.3.1.4(J)	
												LTJ	AppJ	2-SI-4.7.A.2.g-3/77b	
												FSC	Q	2-SR-3.6.1.3.5(77)	
												STC	Q	2-SR-3.6.1.3.5(77)	
2-FCV-78-61	RHR TO FPC SUPPLY	2-47E855-1 / H-6	B	PASS	2	6	GA	MO	C	C	FAI	RPI	2Y	2-SI-3.2.10.P	
2-FCV-85-37C	SDIV DRN ISOL WEST	2-47E2820-6 / A-6	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.2.1(85)	
												FSC	Q	2-SR-3.1.8.2	
												STC	Q	2-SR-3.1.8.2	
2-FCV-85-37E	SDIV DRN ISOL EAST	2-47E2820-6 / A-3	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.2.1(85)	
												FSC	Q	2-SR-3.1.8.2	
												STC	Q	2-SR-3.1.8.2	
2-FCV-85-82A	SCRM DISCH HDR VT WEST	2-47E2820-6 / H-7	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.2.1(85)	
												FSC	Q	2-SR-3.1.8.2	
												STC	Q	2-SR-3.1.8.2	
2-FCV-85-83A	SCRM DISCH HDR VT EAST	2-47E2820-6 / H-3	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	2-SR-3.3.3.2.1(85)	
												FSC	Q	2-SR-3.1.8.2	
												STC	Q	2-SR-3.1.8.2	
2-CKV-85-589	CHARGING WTR CHECK (185 TOTAL)	2-47E820-2 / F-3	C	ACT	2	0.5	CK	SA	O/C	C	N/A	BDO	RO	2-SI-3.2.18	DTJ-3
												CVC	RO	2-SI-3.2.18	DTJ-3

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
2-CKV-85-755B	CRD BACKFILL LINE CHECK VLV	2-47E810-1 / B-3	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.31	
2-CKV-85-763B	CRD BACKFILL LINE CHECK VLV	2-47E810-1 / B-3	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.31	
2-CKV-85-764B	CRD BACKFILL LINE CHECK VLV	2-47E810-1 / C-3	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.31	
2-CKV-85-765B	CRD BACKFILL LINE CHECK VLV	2-47E810-1 / C-3	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	2-SI-3.2.3 2-SI-3.2.31	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-PCV-1-4	MS LN A RLF	3-47E801-1 / B-3	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV
3-PCV-1-5	MS LN A RLF	3-47E801-1 / B-5	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV : ADS
3-ECKV-1-13FEA	EXCESS FLOW CKV TO FT-1-13 (X-34A)	3-47E801-1 / A-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-ECKV-1-13FEB	EXCESS FLOW CKV TO FT-1-13 (X-30A)	3-47E801-1 / A-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-FCV-1-14	MS LN A INBD ISOL	3-47E801-1 / B-6	A	ACT	1	26	GL	AO	O	C	C	RPI LTJ STC PSC FSC	2Y AppJ CSD Q RO	3-SR-3.3.3.1.4(MSIV) 3-SI-3.2.12 3-SR-3.6.1.3.10(A) 3-GOI-100-12A 3-SR-3.6.1.3.6 3-SR-3.3.1.1.8(5) 3-SI-3.2.12(INBD) 3-SI-3.2.12	 DTJ-4 DTJ-4
3-FCV-1-15	MS LN A OUTBD ISOL	3-47E801-1 / B-7	A	ACT	1	26	GL	AO	O	C	C	RPI LTJ FSC STC PSC	2Y AppJ CSD CSD Q	3-SR-3.3.3.1.4(MSIV) 3-SI-3.2.12 3-SR-3.6.1.3.10(A OUTBD) 3-SI-3.2.12(OUTBD) 3-SI-3.2.12 3-GOI-100-12A 3-SR-3.6.1.3.6 3-SR-3.3.1.1.8(5)	 DTJ-4 DTJ-4
3-PCV-1-18	MS LN B RLF	3-47E801-1 / C-1	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV : ADS
3-PCV-1-19	MS LN B RLF	3-47E801-1 / C-2	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV : ADS
3-PCV-1-22	MS LN B RLF	3-47E801-1 / C-3	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV : ADS

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-PCV-1-23	MS LN B RLF	3-47E801-1 / C-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV
3-ECKV-1-25FEA	EXCESS FLOW CKV TO FT-1-25 (X-34B)	3-47E801-1 / A-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-ECKV-1-25FEB	EXCESS FLOW CKV TO FT-1-25 (X-30B)	3-47E801-1 / A-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-FCV-1-26	MS LN B INBD ISOL	3-47E801-1 / C-6	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(MSIV) 3-SI-3.2.12	
												LTJ	AppJ	3-SR-3.6.1.3.10(B)	
												STC	CSD	3-GOI-100-12A 3-SR-3.6.1.3.6	DTJ-4
												PSC	Q	3-SR-3.3.1.1.8(5)	
												FSC	RO	3-SI-3.2.12(INBD) 3-SI-3.2.12	DTJ-4
3-FCV-1-27	MS LN B OUTBD ISOL	3-47E801-1 / C-7	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(MSIV) 3-SI-3.2.12	
												LTJ	AppJ	3-SR-3.6.1.3.10(B OUTBD)	
												FSC	CSD	3-SI-3.2.12(OUTBD) 3-SI-3.2.12	DTJ-4
												STC	CSD	3-GOI-100-12A 3-SR-3.6.1.3.6	DTJ-4
												PSC	Q	3-SR-3.3.1.1.8(5)	
3-PCV-1-30	MS LN C RLF	3-47E801-1 / E-1	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV
3-PCV-1-31	MS LN C RLF	3-47E801-1 / E-2	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV
3-PCV-1-34	MS LN C RLF	3-47E801-1 / E-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV : ADS
3-ECKV-1-36FEA	EXCESS FLOW CKV TO FT-1-36 (X-34C)	3-47E801-1 / G-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-ECKV-1-36FEB	EXCESS FLOW CKV TO FT-1-36 (X-30C)	3-47E801-1 / G-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-1-37	MS LN C INBD ISOL	3-47E801-1 / E-6	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(MSIV) 3-SI-3.2.12	
												LTJ	AppJ	3-SR-3.6.1.3.10(C)	
												STC	CSD	3-GOI-100-12A 3-SR-3.6.1.3.6	DTJ-4
												PSC	Q	3-SR-3.3.1.1.8(5)	
												FSC	RO	3-SI-3.2.12(INBD) 3-SI-3.2.12	DTJ-4
3-FCV-1-38	MS LN C OUTBD ISOL	3-47E801-1 / E-7	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(MSIV) 3-SI-3.2.12	
												LTJ	AppJ	3-SR-3.6.1.3.10(C OUTBD)	
												FSC	CSD	3-SI-3.2.12(OUTBD) 3-SI-3.2.12	DTJ-4
												STC	CSD	3-GOI-100-12A 3-SR-3.6.1.3.6	DTJ-4
												PSC	Q	3-SR-3.3.1.1.8(5)	
3-PCV-1-41	MS LN D RLF	3-47E801-1 / F-3	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV : ADS
3-PCV-1-42	MS LN D RLF	3-47E801-1 / F-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV
3-ECKV-1-50FEA	EXCESS FLOW CKV TO FT-1-50 (X-34D)	3-47E801-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-ECKV-1-50FEB	EXCESS FLOW CKV TO FT-1-50 (X-30D)	3-47E801-1 / G-5	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-FCV-1-51	MS LN D INBD ISOL	3-47E801-1 / F-6	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(MSIV) 3-SI-3.2.12	
												LTJ	AppJ	3-SR-3.6.1.3.10(D INBD)	
												STC	CSD	3-GOI-100-12A 3-SR-3.6.1.3.6	DTJ-4
												PSC	Q	3-SR-3.3.1.1.8(5)	
												FSC	RO	3-SI-3.2.12(INBD) 3-SI-3.2.12	DTJ-4

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-1-52	MS LN D OUTBD ISOL	3-47E801-1 / E-7	A	ACT	1	26	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(MSIV) 3-SI-3.2.12	
												LTJ	AppJ	3-SR-3.6.1.3.10(D)	
												FSC	CSD	3-SI-3.2.12(OUTBD)	DTJ-4
												STC	CSD	3-SI-3.2.12 3-GOI-100-12A	DTJ-4
												PSC	Q	3-SR-3.6.1.3.6 3-SR-3.3.1.1.8(5)	
3-FCV-1-55	MS DRN LN INBD ISOL	3-47E801-1 / D-6	A	ACT	1	3	GA	MO	O/C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(A)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/1e	
												STC	Q	3-SR-3.6.1.3.5(MS)	
3-FCV-1-56	MS DRN LN OUTBD ISOL	3-47E801-1 / D-7	A	ACT	1	3	GA	MO	O/C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(A)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/1e	
												STC	Q	3-SR-3.6.1.3.5(MS)	
3-FCV-1-57	MS DRN TO COND ISOL	3-47E801-1 / D-9	B	PASS	2	3	GL	MO	O	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(A)	
3-FCV-1-58	MS DRN TO COND ISOL	3-47E801-1 / D-9	B	ACT	2	3	GL	MO	C	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(A)	
												STO	Q	3-SR-3.6.1.3.5(MS)	
3-FCV-1-59	MS DRN TO COND ISOL	3-47E801-1 / F-2	B	ACT	2	4	GA	MO	C	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(A)	
												STO	Q	3-SR-3.6.1.3.5(MS)	
3-FCV-1-127	RFPT 3A HP STOP VLV	3-47E801-2 / B-7	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(C)	
												FSC	Q	3-SI-3.2.29	
												STC	Q	3-SI-3.2.29	
3-FCV-1-135	RFPT 3B HP STOP VLV	3-47E801-2 / B-6	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(C)	
												FSC	Q	3-SI-3.2.29	
												STC	Q	3-SI-3.2.29	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-1-143	RFPT 3C HP STOP VLV	3-47E801-2 / B-5	B	ACT	2	4	GA	HO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(C)	
												FSC	Q	3-SI-3.2.29	
												STC	Q	3-SI-3.2.29	
3-FCV-1-145	STM SEAL BYPASS ISOL	3-47E807-2 / C-6	B	ACT	2	4	GL	MO	O/C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(B)	
												STC	CSD	3-SI-3.2.30	DTJ-12
3-PCV-1-147	MS STM SEAL ISOL	3-47E807-2 / D-6	B	ACT	2	4	ANG	AO	TH	C	C	RPI	2Y	3-SR-3.3.3.1.4(B) 3-SI-3.2.30	
												FSC	CSD	3-SI-3.2.30	DTJ-11
												STC	CSD	3-SI-3.2.30	DTJ-11
3-PCV-1-151	SJAE 3A STG 1/2 REG	3-47E801-2 / B-4	B	ACT	2	1.5	GL	AO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(B) 3-SI-3.2.30	
												FSC	CSD	3-SI-3.2.30	DTJ-8
												STC	CSD	3-SI-3.2.30	DTJ-8
3-PCV-1-153	SJAE 3B STG 1/2 REG	3-47E801-2 / B-3	B	ACT	2	1.5	GL	AO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(B) 3-SI-3.2.30	
												FSC	CSD	3-SI-3.2.30	DTJ-8
												STC	CSD	3-SI-3.2.30	DTJ-8
3-FCV-1-154	AUX STM TO STM SEAL ISOL	3-47E807-2 / B-5	B	PASS	2	4	GA	MO	C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(B)	
3-PCV-1-166	SJAE 3A STG 3 REG	3-47E801-2 / B-4	B	ACT	2	1.5	GL	AO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(B) 3-SI-3.2.30	
												FSC	CSD	3-SI-3.2.30	DTJ-8
												STC	CSD	3-SI-3.2.30	DTJ-8
3-PCV-1-167	SJAE 3B STG 3 REG	3-47E801-2 / B-3	B	ACT	2	1.5	GL	AO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(B) 3-SI-3.2.30	
												FSC	CSD	3-SI-3.2.30	DTJ-8
												STC	CSD	3-SI-3.2.30	DTJ-8

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-1-168	MS LN A DRN ISOL	3-47E801-1 / C-9	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI STO	2Y CSD	3-SR-3.3.3.1.4(A) 3-SI-3.2.32 3-SI-3.2.32	 DTJ-9
3-FCV-1-169	MS LN B DRN ISOL	3-47E801-1 / C-9	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI STO	2Y CSD	3-SR-3.3.3.1.4(A) 3-SI-3.2.32 3-SI-3.2.32	 DTJ-9
3-FCV-1-170	MS LN C DRN ISOL	3-47E801-1 / E-9	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI STO	2Y CSD	3-SR-3.3.3.1.4(A) 3-SI-3.2.32 3-SI-3.2.32	 DTJ-9
3-FCV-1-171	MS LN D DRN ISOL	3-47E801-1 / E-9	B	ACT	2	2	GA	MO	O/C	O	FAI	RPI STO	2Y CSD	3-SR-3.3.3.1.4(A) 3-SI-3.2.32 3-SI-3.2.32	 DTJ-9
3-PCV-1-179	MS LN A RLF	3-47E801-1 / B-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV
3-PCV-1-180	MS LN D RLF	3-47E801-1 / F-4	B/C	ACT	1	6	RV	AO/SA	C	O/C	N/A	RV	RV	3-SI-3.2.9 0-SR-3.4.3.1.a 0-SR-3.4.3.1.b 3-SR-3.4.3.2	MSRV
3-CKV-1-742	OG PREHTR 3A SPLY	3-47E801-2 / D-2	C	ACT	2	0.75	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3	
3-CKV-1-744	OG PREHTR 3B SPLY	3-47E801-2 / C-2	C	ACT	2	0.75	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3	
3-CKV-3-554	FDWTR LN A OUTBD ISOL	3-47E803-1 / G-6	A/C	ACT	1	24	CK	SA	O	C	N/A	LTJ BDO CVC	AppJ RO RO	3-SI-4.7.A.2.g-3/3a 2-SI-3.2.31 3-SI-4.7.A.2.g-3/3a	 DTJ-1 DTJ-1
3-CKV-3-558	FDWTR LN A INBD ISOL	3-47E803-1 / G-7	A/C	ACT	1	24	CK	SA	O	O/C	N/A	LTJ CVC CVO	AppJ RO RO	3-SI-4.7.A.2.g-3/3a 3-SI-4.7.A.2.g-3/3a 3-SI-3.2.31	 DTJ-1 DTJ-1

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-3-568	FDWTR LN B OUTBD ISOL	3-47E803-1 / F-6	A/C	ACT	1	24	CK	SA	O	C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/3b	
												BDO	RO	3-SI-3.2.31	DTJ-1
												CVC	RO	3-SI-4.7.A.2.g-3/3b	DTJ-1
3-CKV-3-572	FDWTR LN B INBD ISOL	3-47E803-1 / F-6	A/C	ACT	1	24	CK	SA	O	O/C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/3b	
												CVC	RO	3-SI-4.7.A.2.g-3/3b	DTJ-1
												CVO	RO	3-SI-3.2.31	DTJ-1
3-ECKV-3-816	EXCESS FLOW CKV VLV NEAR PENE (28D)	3-47E803-5 / D-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-ECKV-3-817	EXCESS FLOW CKV NEAR PENE (28A)	3-47E803-5 / D-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-ECKV-3-818	EXCESS FLOW CKV NEAR PENE (29D)	3-47E803-5 / C-9	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-3-819	EXCESS FLOW CKV NEAR PENE (29A)	3-47E803-5 / B-9	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-3-829	EXCESS FLOW CKV NEAR PENE (28C)	3-47E803-5 / E-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-ECKV-3-830	EXCESS FLOW CKV NEAR PENE (28B)	3-47E803-5 / F-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-ECKV-3-833	EXCESS FLOW CKV NEAR PENE (29B)	3-47E803-5 / C-9	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-3-835	EXCESS FLOW CKV NEAR PENE (28E)	3-47E803-5 / G-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-ECKV-3-836	EXCESS FLOW CKV NEAR PENE (29C)	3-47E803-5 / C-9	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-3-837	EXCESS FLOW CKV NEAR PENE (28F)	3-47E803-5 / G-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.8(6)	
3-ECKV-3-838	EXCESS FLOW CKV NEAR VLV (240A)	3-47E803-5 / F-2	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-FCV-6-100	TSV #1 DRN ISOL	3-47E807-1 / G-8	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(B)	
												STC	Q	3-SI-3.2.35	
3-FCV-6-101	TSV #2 DRN ISOL	3-47E807-1 / F-8	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(B)	
												STC	Q	3-SI-3.2.35	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-6-102	TSV #3 DRN ISOL	3-47E807-1 / E-8	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(B) 3-SI-3.2.35	
3-FCV-6-103	TSV #4 DRN ISOL	3-47E807-1 / D-8	B	ACT	2	1	GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(B) 3-SI-3.2.35	
3-FCV-6-122	RFPT 3A STOP VLV DRN	3-47E807-2 / G-6	B	ACT	2		GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(C) 3-SI-3.2.35	
3-FCV-6-127	RFPT 3B STOP VLV DRN	3-47E807-2 / G-4	B	ACT	2		GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(C) 3-SI-3.2.35	
3-FCV-6-132	RFPT 3C STOP VLV DRN	3-47E807-2 / G-2	B	ACT	2		GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(C) 3-SI-3.2.35	
3-FCV-6-153	RFPT 3A STOP VLV DRN	3-47E807-2 / G-6	B	ACT	2		GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(C) 3-SI-3.2.35	, , , ,
3-FCV-6-155	RFPT 3B STOP VLV DRN	3-47E807-2 / G-3	B	ACT	2		GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(C) 3-SI-3.2.35	, , , ,
3-FCV-6-157	RFPT 3C STOP VLV DRN	3-47E807-2 / G-1	B	ACT	2		GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(C) 3-SI-3.2.35	, , , ,
3-CKV-6-822	SJAE 3B COND DRN	3-47E805-3 / G-7	C	ACT	2	0.5	CK	SA	O	C	N/A	CM	CM	3-SI-3.2.3	
3-CKV-6-826	SJAE 3A COND DRN	3-47E805-3 / G-6	C	ACT	2	0.5	CK	SA	O	C	N/A	CM	CM	3-SI-3.2.3	
3-CKV-10-506	MSRV TL PIPE A VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-507	MSRV TL PIPE B VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-508	MSRV TL PIPE C VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-10-509	MSRV TL PIPE D VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-510	MSRV TL PIPE E VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-511	MSRV TL PIPE F VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-512	MSRV TL PIPE G VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-513	MSRV TL PIPE H VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-514	MSRV TL PIPE J VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-515	MSRV TL PIPE K VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-516	MSRV TL PIPE L VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-519	MSRV TL PIPE M VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-520	MSRV TL PIPE N VAC RLF	3-47E817-1 / C-3	C	ACT	2	2.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-521	MSRV TL PIPE A VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-522	MSRV TL PIPE B VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-523	MSRV TL PIPE C VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-524	MSRV TL PIPE D VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-525	MSRV TL PIPE E VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-526	MSRV TL PIPE F VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-527	MSRV TL PIPE G VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-528	MSRV TL PIPE H VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-529	MSRV TL PIPE J VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-530	MSRV TL PIPE K VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-10-531	MSRV TL PIPE L VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-532	MSRV TL PIPE M VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-CKV-10-533	MSRV TL PIPE N VAC RLF	3-47E817-1 / C-3	C	ACT	2	10	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.11	
3-SHV-12-623	STM TO RCIC DR TRAP OUTL SHUTOFF VLV	3-47E815-5 / A-4	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-BYV-12-625	STM TO RCIC DR TRAP BYPASS VLV	3-47E815-5 / A-4	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-SHV-12-635	STM INL TO U3 HPCI TRAP OUTL SHUTOFF VLV	3-47E815-5 / B-4	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-BYV-12-637	STM INL TO U3 HPCI TRAP BYPASS VLV	3-47E815-5 / B-4	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-FCV-23-34	RHR HTX A OUTLT	3-47E858-1 / F-7	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SI-3.2.10.B 3-SI-4.5.C.1(A) 3-SI-4.5.C.1(A)	
3-FCV-23-40	RHR HTX C OUTLT	3-47E858-1 / H-7	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SI-3.2.10.B 3-SI-4.5.C.1(C) 3-SI-4.5.C.1(C)	
3-FCV-23-46	RHR HTX B OUTLT	3-47E858-1 / F-4	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SI-3.2.10.B 3-SI-4.5.C.1(B) 3-SI-4.5.C.1(B)	
3-FCV-23-52	RHR HTX D OUTLT	3-47E858-1 / H-4	B	ACT	3	16	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SI-3.2.10.B 3-SI-4.5.C.1(D) 3-SI-4.5.C.1(D)	
3-RFV-23-509	RHR HTX A SPLY RLF	3-47E858-1 / D-7	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-SHV-23-512	HX 3A DEMIN WTR INLET	3-47E858-1 / E-7	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-RFV-23-516	RHR HTX A TUBE RLF	3-47E858-1 / F-6	C	ACT	3	1	TRV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-23-529	RHR HTX B SPLY RLF	3-47E858-1 / E-5	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-SHV-23-532	HX 3B DEMIN WTR INLET	3-47E858-1 / E-5	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
3-RFV-23-536	RHR HTX B TUBE RLF	3-47E858-1 / F-6	C	ACT	3	1	TRV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-23-549	RHR HTX C SPLY RLF	3-47E858-1 / D-7	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-SHV-23-552	HX 3C DEMIN WTR INLET	3-47E858-1 / F-7	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
3-RFV-23-555	RHR HTX C TUBE RLF	3-47E858-1 / H-6	C	ACT	3	1	TRV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-23-568	RHR HTX D SPLY RLF	3-47E858-1 / E-4	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-SHV-23-571	HX 3D DEMIN WTR INLET	3-47E858-1 / F-5	B	PASS	3	1.5	GA	M	C	C	N/A	NTR	NTR		
3-RFV-23-574	RHR HTX D TUBE RLF	3-47E858-1 / H-6	C	ACT	3	1	TRV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-CKV-23-579	RHR HTX A INLT CK	3-47E858-1 / E-7	C	ACT	3	16	CK	SA	C	O	N/A	BDC CVO	Q Q	3-SI-4.5.C.1(A) 3-SI-4.5.C.1(A)	
3-CKV-23-580	RHR HTX B INLT CK	3-47E858-1 / E-5	C	ACT	3	16	CK	SA	C	O	N/A	BDC CVO	Q Q	3-SI-4.5.C.1(B) 3-SI-4.5.C.1(B)	
3-CKV-23-581	RHR HTX C INLT CK	3-47E858-1 / E-7	C	ACT	3	16	CK	SA	C	O	N/A	BDC CVO	Q Q	3-SI-4.5.C.1(C) 3-SI-4.5.C.1(C)	
3-CKV-23-582	RHR HTX D INLT CK	3-47E858-1 / E-4	C	ACT	3	16	CK	SA	C	O	N/A	BDC CVO	Q Q	3-SI-4.5.C.1(D) 3-SI-4.5.C.1(D)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-43-13	RECIRC CNTMT ISOL	3-47E610-43-1 / H-4	A	ACT	2	0.75	GL	AO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(L)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/43a	
												FSC	Q	3-SR-3.6.1.3.5(43)	
												STC	Q	3-SR-3.6.1.3.5(43)	
3-FCV-43-14	RECIRC CNTMT ISOL	3-47E610-43-1 / G-4	A	ACT	2	0.75	GL	AO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(L)	
												LTJ	AppJ		
												FSC	Q	3-SR-3.6.1.3.5(43)	
												STC	Q	3-SR-3.6.1.3.5(43)	
3-FSV-43-40	PASS CNTMT ISOL	3-47E867-3 / F-2	A	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(L)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/43d	
												FSC	Q	3-SR-3.6.1.3.5(43)	
												STC	Q	3-SR-3.6.1.3.5(43)	
3-FSV-43-42	PASS CNTMT ISOL	3-47E867-3 / F-2	A	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(L)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/43d	
												FSC	Q	3-SR-3.6.1.3.5(43)	
												STC	Q	3-SR-3.6.1.3.5(43)	
3-FSV-43-50	PASS CNTMT ISOL	3-47E867-3 / G-2	B	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(L)	
												FSC	Q	3-SR-3.6.1.3.5(43)	
												STC	Q	3-SR-3.6.1.3.5(43)	
3-FSV-43-56	PASS CNTMT ISOL	3-47E867-3 / G-2	B	ACT	2	0.5	GL	SO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(L)	
												FSC	Q	3-SR-3.6.1.3.5(43)	
												STC	Q	3-SR-3.6.1.3.5(43)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FSV-43-70	PASS CNTMT ISOL	3-47E867-3 / B-2	A	ACT	1	0.5	GL	SO	O/C	C	C	RPI	2Y	3-SR-3.3.3.1.4(L)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/43f	
												FSC	Q	3-SR-3.6.1.3.5(43)	
												STC	Q	3-SR-3.6.1.3.5(43)	
3-SMV-43-622	RHR HTX A DISCH GRAB	3-47E610-43-6 / F-8	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
3-SMV-43-623	RHR HTX B DISCH GRAB	3-47E610-43-6 / F-8	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
3-SMV-43-624	RHR HTX C DISCH GRAB	3-47E610-43-6 / F-9	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
3-SMV-43-625	RHR HTX D DISCH GRAB	3-47E610-43-6 / F-9	B	PASS	3	0.75	GL	M	C	C	N/A	NTR	NTR		
3-ISV-43-631	MAN-43-15 SAMPLE INLET	3-47E610-43-6 / C-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-ISV-43-631A	SAMPLE BOMB FOR NON-CONDENSIBLES	3-47E610-43-6 / C-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-ISV-43-632	MS BEFORE SV GRAB	3-47E610-43-6 / C-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-FCV-63-8A	SLC PMP A INJ	3-47E854-1 / E-6	D	ACT	2	1.5	EX	EXP	C	O	N/A	EXP	EXP	3-SR-3.1.7.7	
3-FCV-63-8B	SLC PMP B INJ	3-47E854-1 / E-6	D	ACT	2	1.5	EX	EXP	C	O	N/A	EXP	EXP	3-SR-3.1.7.7	
3-SHV-63-502	DEMIN WTR TO SLC SUCTION LINE SHUTOFF VLV	3-47E854-1 / F-2	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-SHV-63-509	DEMIN WTR TO A PUMP SUCTION SHUTOFF VLV	3-47E854-1 / D-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-SHV-63-511	DEMIN WTR TO B PUMP SUCTION SHUTOFF VLV	3-47E854-1 / D-5	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-RFV-63-512	SLC PMP A RLF	3-47E854-1 / E-5	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-63-513	SLC PMP B RLF	3-47E854-1 / E-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-CKV-63-514	SLC PMP A DISCH CK	3-47E854-1 / E-5	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-4.4.A.1(A) 3-SR-3.1.7.7	
3-CKV-63-516	SLC PMP B DISCH CK	3-47E854-1 / E-4	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.1.7.7	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-63-525	SLC CNTMT ISOL	3-47E854-1 / E-7	C	ACT	1	1.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.1.7.7	
3-CKV-63-526	SLC CNTMT ISOL	3-47E854-1 / D-7	C	ACT	1	1.5	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.1.7.7	
3-SCV-64-678	SUPPR CHMBR LEVEL SVC CONN FOR 3-LE-64-66	3-47E865-12 / A-4	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-SCV-64-682	SUPPR CHMBR LEVEL SVC CONN FOR 3-LE-64-54	3-47E865-12 / A-6	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-FCV-67-50	EECW N HDR TO RBCCW HTX	3-47E859-1 / G-5	B	ACT	3	8	BF	AO	O/C	C	C	RPI FSC STC	2Y Q Q	3-SI-3.2.10.C 0-SI-4.5.C.1(1) 0-SI-4.5.C.1(1)	
3-FCV-67-51	EECW S HDR TO RBCCW HTX	3-47E859-1 / B-6	B	ACT	3	8	BF	AO	O/C	C	C	RPI FSC STC	2Y Q Q	3-SI-3.2.10.C 0-SI-4.5.C.1(1) 0-SI-4.5.C.1(1)	
3-CKV-67-541	CS I RM CLR S HDR SPLY	3-47E859-1 / F-8	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CS I)	
3-CKV-67-542	CS I RM CLR S HDR SPLY	3-47E859-1 / F-8	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CS I)	
3-CKV-67-558	RHR I RM CLR S HDR SPLY	3-47E859-1 / C-6	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(RHR I)	
3-CKV-67-559	RHR I RM CLR S HDR SPLY	3-47E859-1 / C-6	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(RHR I)	
3-CKV-67-584	CS II RM CLR S HDR SPLY	3-47E859-1 / F-5	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CBC-3A) 3-SI-3.2.4(CBC-3B) 3-SI-3.2.4(CS II)	
3-CKV-67-585	CS II RM CLR S HDR SPLY	3-47E859-1 / F-5	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CBC-3A) 3-SI-3.2.4(CBC-3B) 3-SI-3.2.4(CS II)	
3-CKV-67-600	RHR II RM CLR S HDR SPLY	3-47E859-1 / B-4	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(RHR II)	
3-CKV-67-601	RHR II RM CLR S HDR SPLY	3-47E859-1 / B-4	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(RHR II)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-67-638	RHR I RM CLR N HDR SPLY	3-47E859-1 / F-7	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(RHR I)	
3-CKV-67-639	RHR I RM CLR N HDR SPLY	3-47E859-1 / C-7	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(RHR I)	
3-CKV-67-648	CS I RM CLR N HDR SPLY	3-47E859-1 / F-6	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CS I)	
3-CKV-67-649	CS I RM CLR N HDR SPLY	3-47E859-1 / F-6	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CS I)	
3-CKV-67-656	CS II RM CLR N HDR SPLY	3-47E859-1 / F-4	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CS II)	
3-CKV-67-657	CS II RM CLR N HDR SPLY	3-47E859-1 / F-4	C	ACT	3	2.5	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CS II)	
3-CKV-67-659	RHR II RM CLR N HDR SPLY	3-47E859-1 / G-3	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(RHR II)	
3-CKV-67-660	RHR II RM CLR N HDR SPLY	3-47E859-1 / C-4	C	ACT	3	3	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(RHR II)	
3-CKV-67-693	3A DG CLR N HDR CK	3-47E859-2 / C-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG A) 3-SI-3.2.4(DG-A)	
3-CKV-67-694	3A DG CLR N HDR CK	3-47E859-2 / C-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG A) 3-SI-3.2.4(DG-A)	
3-CKV-67-695	3A DG CLR S HDR CK	3-47E859-2 / C-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG A) 3-SI-3.2.4(DG-A)	
3-CKV-67-696	3A DG CLR S HDR CK	3-47E859-2 / C-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG A) 3-SI-3.2.4(DG-A)	
3-CKV-67-703	3B DG CLR N HDR CK	3-47E859-2 / D-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG B) 3-SI-3.2.4(DG-B)	
3-CKV-67-704	3B DG CLR N HDR CK	3-47E859-2 / D-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG B) 3-SI-3.2.4(DG-B)	
3-CKV-67-705	3B DG CLR S HDR CK	3-47E859-2 / D-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG B) 3-SI-3.2.4(DG-B)	
3-CKV-67-706	3B DG CLR S HDR CK	3-47E859-2 / D-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG B) 3-SI-3.2.4(DG-B)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-67-713	3C DG CLR N HDR CK	3-47E859-2 / F-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG C) 3-SI-3.2.4(DG-C)	
3-CKV-67-714	3C DG CLR N HDR CK	3-47E859-2 / F-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG C) 3-SI-3.2.4(DG-C)	
3-CKV-67-715	3C DG CLR S HDR CK	3-47E859-2 / F-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG C) 3-SI-3.2.4(DG-C)	
3-CKV-67-716	3C DG CLR S HDR CK	3-47E859-2 / F-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG C) 3-SI-3.2.4(DG-C)	
3-CKV-67-723	3D DG CLR N HDR CK	3-47E859-2 / G-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG D) 3-SI-3.2.4(DG-D)	
3-CKV-67-724	3D DG CLR N HDR CK	3-47E859-2 / G-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG D) 3-SI-3.2.4(DG-D)	
3-CKV-67-725	3D DG CLR S HDR CK	3-47E859-2 / G-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG D) 3-SI-3.2.4(DG-D)	
3-CKV-67-726	3D DG CLR S HDR CK	3-47E859-2 / G-6	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(DG D) 3-SI-3.2.4(DG-D)	
3-CKV-67-735	U3 SDBR CHLR N HDR CK	3-47E859-2 / D-4	C	ACT	3	2	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(SDBR)	
3-CKV-67-736	U3 SDBR CHLR N HDR CK	3-47E859-2 / D-4	C	ACT	3	2	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(SDBR)	
3-CKV-67-737	U3 SDBR CHLR S HDR CK	3-47E859-2 / F-4	C	ACT	3	2	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(SDBR)	
3-CKV-67-738	U3 SDBR CHLR S HDR CK	3-47E859-2 / F-4	C	ACT	3	2	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(SDBR)	
3-RFV-67-783	3B-1 INL RV	3-47E859-2 / E-4	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-67-799	3A-1 INL RV	3-47E859-2 / F-4	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-67-802	3B-2 INL RV	3-47E859-2 / C-4	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-67-805	3A-2 INL RV	3-47E859-2 / D-4	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-SHV-67-807	U3 SDBR CHL XTIE	3-47E859-2 / E-4	B	ACT	3	2	GA	M	C	O/C	N/A	MS	2Y	0-SI-3.2.10.C	
3-SHV-67-808	U3 SDBR CHL XTIE	3-47E859-2 / E-4	B	ACT	3	2	GA	M	C	O/C	N/A	MS	2Y	0-SI-3.2.10.C	
3-CKV-67-841	U3 CB CHLR N HDR SPLY	1-47E859-1 / G-1	C	ACT	3	6	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CBC 3A) 3-SI-3.2.4(CBC 3B) 3-SI-3.2.4(CBC-3A) 3-SI-3.2.4(CBC-3B)	
3-CKV-67-842	U3 CB CHLR N HDR SPLY	1-47E859-1 / G-1	C	ACT	3	6	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CBC 3A) 3-SI-3.2.4(CBC 3B) 3-SI-3.2.4(CBC-3A) 3-SI-3.2.4(CBC-3B)	
3-CKV-67-845	U3 CB CHLR S HDR SPLY	1-47E859-1 / B-1	C	ACT	3	6	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CBC 3A) 3-SI-3.2.4(CBC 3B) 3-SI-3.2.4(CBC-3A) 3-SI-3.2.4(CBC-3B)	
3-CKV-67-846	U3 CB CHLR S HDR SPLY	1-47E859-1 / B-1	C	ACT	3	6	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(CBC 3A) 3-SI-3.2.4(CBC 3B) 3-SI-3.2.4(CBC-3A) 3-SI-3.2.4(CBC-3B)	
3-CKV-67-5002	U3 EBR ACU S HDR SUP	3-47E859-1 / D-2	C	ACT	3	2	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(ACU)	
3-CKV-67-5021	U3 EBR ACU N HDR SUP	3-47E859-1 / E-2	C	ACT	3	2	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(ACU)	
3-CKV-67-5022	U3 EBR ACU S HDR SUP	3-47E859-1 / D-2	C	ACT	3	2	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(ACU)	
3-CKV-67-5023	U3 EBR ACU N HDR SUP	3-47E859-1 / E-2	C	ACT	3	2	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.4(ACU)	
3-FCV-68-3	RECIRC PMP A DISCH	3-47E817-1 / D-6	B	ACT	1	28	GA	MO	O	C	FAI	RPI STC	2Y CSD	3-SI-3.2.10.D	 DTJ-5
3-ECKV-68-5A	EXSV FL CKV FOR FT-68-5A	3-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-5B	EXSV FL CKV FOR FT-68-5B	3-47E817-1 / A-8	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-7A	EXSV FL CKV FOR FT-68-7A	3-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-ECKV-68-7B	EXSV FL CKV FOR FT-68-7B	3-47E817-1 / D-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-68-7BA	EXSV FLOW CHECK VLV FOR FT-68-7A/7B	3-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-8	EXSV FL CKV FOR FT-68-8	3-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-10	EXSV FL CKV FOR FT-68-10	3-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-11	EXSV FL CKV FOR FT-68-11	3-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-13	EXSV FL CKV FOR FT-68-13	3-47E817-1 / A-5	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-15A	EXSV FL CKV FOR FI-68-15A	3-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-15BA	EXSV FL CKV FOR FT-68-15B	3-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-15BB	EXSV FL CKV FOR FT-68-15B	3-47E817-1 / D-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-ECKV-68-18	EXSV FL CKV FOR FT-68-18	3-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-19	EXSV FL CKV FOR FT-68-19	3-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-21	EXSV FL CKV FOR FT-68-21	3-47E817-1 / A-5	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-22	EXSV FL CKV FOR FT-68-22	3-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-25A	EXSV FL CKV FOR FT-68-25A	3-47E817-1 / A-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-ECKV-68-25B	EXSV FL CKV FOR FT-68-25B	3-47E817-1 / A-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-26	EXSV FL CKV FOR FT-68-26	3-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-28	EXSV FL CKV FOR FT-68-28	3-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-29	EXSV FL CKV FOR FT-68-29	3-47E817-1 / A-6	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-30	EXSV FL CKV FOR FT-68-30	3-47E817-1 / A-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-38A	EXSV FL CKV FOR FT-68-38A	3-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-ECKV-68-38B	EXSV FL CKV FOR FT-68-38B	3-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-39	EXSV FL CKV FOR FT-68-39	3-47E817-1 / A-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-40	EXSV FL CKV FOR FT-68-40	3-47E817-1 / A-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-42	EXSV FL CKV FOR FT-68-42	3-47E817-1 / A-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-43	EXSV FL CKV FOR FT-68-43	3-47E817-1 / A-4	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-52	EXSV FLOW CHECK VLV FOR PDT-68-52	3-47E817-1 / D-3	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-ECKV-68-63	EXSV FL CKV FOR PT-68-63	3-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-64	EXSV FL CKV FOR PT-68-64	3-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-65A	EXSV FL CKV FOR PDT-68-65	3-47E817-1 / B-8	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-65B	EXSV FL CKV FOR PDT-68-65	3-47E817-1 / B-7	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-75	EXSV FL CKV FOR PT-68-75	3-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-76	EXSV FL CKV FOR PT-68-76	3-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-FCV-68-79	RECIRC PMP B DISCH	3-47E817-1 / C-4	B	ACT	1	28	GA	MO	O	C	FAI	RPI STC	2Y CSD	3-SI-3.2.10.D	 DTJ-5
3-ECKV-68-81A	EXSV FL CKV FOR FT-68-81A	3-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-81B	EXSV FL CKV FOR FT-68-81B	3-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-82A	EXSV FL CKV FOR PDT-68-82	3-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-82B	EXSV FL CKV FOR PDT 68-82	3-47E817-1 / B-3	C	ACT	2	1	XCK	SA	O	C	N/A	CM	CM		
3-ECKV-68-93	EXSV FL CKV FOR PS-68-93	3-47E817-1 / C-8	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-68-94	EXSV FL CKV FOR PS-68-94	3-47E817-1 / C-7	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-68-508	RECIRC PMP SEAL ISOL	3-47E817-1 / A-6	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/68a	
												CM	CM	3-SI-3.2.3 3-SI-3.2.31 3-SI-4.7.A.2.g-3/68a	
3-CKV-68-523	RECIRC PMP SEAL ISOL	3-47E817-1 / A-4	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/68b	
												CM	CM	3-SI-3.2.3 3-SI-3.2.31 3-SI-4.7.A.2.g-3/68b	
3-CKV-68-550	RECIRC PMP SEAL ISOL	3-47E817-1 / A-7	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/68a	
												CM	CM	3-SI-3.2.3 3-SI-3.2.31 3-SI-4.7.A.2.g-3/68a	
3-CKV-68-555	RECIRC PMP SEAL ISOL	3-47E817-1 / A-3	A/C	ACT	1	0.75	CK	SA	O	C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/68b	
												CM	CM	3-SI-3.2.3 3-SI-3.2.31 3-SI-4.7.A.2.g-3/68b	
3-FCV-69-1	RWCU INBD CNTMT ISOL	3-47E810-1 / G-7	A	ACT	1	6	GA	MO	O	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(E)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/69	
												STC	Q	3-SR-3.6.1.3.5(RWCU)	
3-FCV-69-2	RWCU OUTBD CNTMT ISOL	3-47E810-1 / G-6	A	ACT	1	6	GA	MO	O	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(E)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/69	
												STC	Q	3-SR-3.6.1.3.5(RWCU)	
3-CKV-69-628	RWCU TO FDWTR ISOL	3-47E810-1 / F-6	A/C	ACT	1	4	CK	SA	C	C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/3a	
												BDO	RO	3-SI-3.2.31	DTJ-1
												CVC	RO	3-SI-4.7.A.2.g-3/3a	DTJ-1
3-CKV-69-629	RWCU TO FDWTR ISOL	3-47E810-1 / E-6	A/C	ACT	1	4	CK	SA	O	C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/3b	
												CM	CM	3-SI-3.2.3 3-SI-3.2.31 3-SI-4.7.A.2.g-3/3b	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-70-47	RBCCW RTN CNTMT ISOL	3-47E822-1 / G-4	A	ACT	2	8	GA	MO	O	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(N)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/70	
												STC	RO	3-SR-3.6.1.3.5(RBCCW)	DTJ-6
3-CKV-70-506	RBCCW SPLY CNTMT ISOL	3-47E822-1 / F-4	A/C	ACT	2	8	CK	SA	O	C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/70	
												CM	CM	3-SI-3.2.3 3-SI-3.2.31 3-SI-4.7.A.2.g-3/70	
3-ECKV-71-1AA	EXCESS FLOW CHECK VALVE TO PDIS-71-1AL	3-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-71-1AB	EXCESS FLOW CHECK VALVETO PDIS-71-1A H	3-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-71-1BA	EXCESS FLOW CHECK VALVE TO PDIS-71-1BL	3-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-ECKV-71-1BB	EXCESS FLOW CHECK VALVE TO PDIS-71-1BH	3-47E813-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(4)	
3-FCV-71-2	RCIC STM LN INBD CNTMT ISOL	3-47E813-1 / G-6	A	ACT	1	3	GA	MO	O	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(F)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/71a	
												STC	Q	3-SR-3.6.1.3.5(RCIC)	
												STO	Q	3-SR-3.6.1.3.5(RCIC)	
3-FCV-71-3	RCIC STM LN OUTBD CNTMT ISOL	3-47E813-1 / G-6	A	ACT	1	3	GA	MO	O	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(F)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/71a	
												STC	Q	3-SR-3.6.1.3.5(RCIC)	
												STO	Q	3-SR-3.6.1.3.5(RCIC)	
3-FCV-71-6A	RCIC STM LN TO COND DRN	3-47E813-1 / E-1	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-71-6B	RCIC STM LN TO COND DRN	3-47E813-1 / E-1	B	ACT	2	1	GL	AO	O	O/C	C	RPI FSC STC STO	2Y Q Q Q		
3-FCV-71-8	RCIC TRB STM SPLY	3-47E813-1 / F-1	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(F) 3-SR-3.6.1.3.5(RCIC) 3-SR-3.6.1.3.5(RCIC)	
3-RPD-71-11A	RCIC TRB EXH RPD	3-47E813-1 / E-3	D	ACT	2	8	RD	SA	C	O/C	N/A	RD	RV	3-SI-3.2.19	
3-HCV-71-14	RCIC TRB EXHAUST VLV	3-47E813-1 / D-6	A/C	ACT	2	8	SCK	SA	C	O/C	N/A	LTJ CM	AppJ CM	3-SI-4.7.A.2.g-3/71b 3-SI-3.2.3 3-SR-3.5.3.3 3-SR-3.5.3.3(COMP)	
3-FCV-71-17	PSC TO RCIC INBD CNTMT ISOL	3-47E813-1 / B-6	B	ACT	2	6	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(F)	
3-FCV-71-18	PSC TO RCIC OUTBD CNTMT ISOL	3-47E813-1 / G-4	B	ACT	2	6	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(F)	
3-RFV-71-19	RCIC SUCT RLF	3-47E813-1 / G-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-FCV-71-25	RCIC LUBE OIL CLG WTR SPLY	3-47E813-1 / B-4	B	ACT	2	2	GL	MO	O	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(F) 3-SR-3.6.1.3.5(RCIC) 3-SR-3.6.1.3.5(RCIC)	
3-SHV-71-32	RCIC COND VAC PMP DISCH	3-47E813-1 / C-6	C	ACT	2	2	SCK	SA	O	C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(RCIC CM)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-71-34	RCIC PMP MIN FLOW	3-47E813-1 / E-5	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(F) 3-SR-3.6.1.3.5(RCIC) 3-SR-3.6.1.3.5(RCIC)	
3-FCV-71-37	RCIC INJ OUTBD ISOL	3-47E813-1 / F-5	B	PASS	2	6	GA	MO	O	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(F)	
3-FCV-71-38	RCIC PMP TEST RTN TO CST	3-47E813-1 / G-5	B	ACT	2	4	GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(F) 3-SR-3.6.1.3.5(RCIC)	
3-FCV-71-39	RCIC INJ INBD ISOL	3-47E813-1 / F-6	B	ACT	2	6	GA	MO	O/C	O	FAI	RPI STO	2Y Q	3-SR-3.3.3.1.4(F) 3-SR-3.6.1.3.5(RCIC)	
3-FCV-71-40	RCIC TESTABLE CK	3-47E813-1 / F-6	A/C	ACT	1	6	TCK	SA	C	O/C	N/A	RPI LTJ CM	2Y AppJ CM	3-SR-3.6.1.3.5(RCIC RO)	
3-FCV-71-59	RCIC TURB EXHAUST VACUUM RELIEF	3-47E813-1 / D-7	B	PASS	2	3	GA	MO	O	O	FAI	NTR	NTR		
3-CKV-71-499	CST TO RCIC PMP INLT CK	3-47E813-1 / G-4	C	ACT	2	6	CK	SA	O/C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.3.3 3-SR-3.5.3.3(COMP)	
3-CKV-71-508	PSC TO RCIC PMP INLT	3-47E813-1 / B-5	C	ACT	2	6	CK	SA	C	O	N/A	CM	CM	3-SI-3.2.3	
3-RFV-71-543	RCIC COND CLG WTR	3-47E813-1 / B-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-CKV-71-547	RCIC PMP MIN FLOW CK	3-47E813-1 / E-5	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.3.3 3-SR-3.5.3.3(COMP) 3-SR-3.6.1.3.5(RCIC CM)	
3-SHV-71-565	AUX STEAM SPLY SHUTOFF VLV	3-47E813-1 / H-2	B	PASS	2	3	GA	M	C	C	N/A	NTR	NTR		
3-CKV-71-580	RCIC TRB EXH CK	3-47E813-1 / D-6	A/C	ACT	2	10	CK	SA	C	O/C	N/A	LTJ CM	AppJ CM	3-SI-4.7.A.2.g-3/71b 3-SI-3.2.3 3-SI-4.7.A.2.g-3/71b 3-SR-3.5.3.3 3-SR-3.5.3.3(COMP) 3-SR-3.6.1.3.5(RCIC CM)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-71-589	RCIC COND PMP	3-47E813-1 / A-3	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.3.3 3-SR-3.5.3.3(COMP)	
3-CKV-71-592	RCIC VAC PMP DISCH CK	3-47E813-1 / D-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(RCIC CM)	
3-CKV-71-597	RCIC TRB EXH VAC RLF	3-47E813-1 / D-6	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(RCIC CM)	
3-CKV-71-598	RCIC TRB EXH VAC RLF	3-47E813-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(RCIC CM)	
3-CKV-71-599	RCIC TRB EXH VAC RLF	3-47E813-1 / D-6	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(RCIC CM)	
3-CKV-71-600	RCIC TRB EXH VAC RLF	3-47E813-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(RCIC CM)	
3-ECKV-73-1AA	EXCESS FLOW CKV FOR 3-PDIS-73-073-1A/1B L	3-47E812-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-ECKV-73-1AB	EXCESS FLOW CKV FOR 3-PDIS-072-1A/B H	3-47E812-1 / H-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(3)	
3-FCV-73-2	HPCI STM LN INBD CNTMT ISOL	3-47E812-1 / G-7	A	ACT	1	10	GA	MO	O	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(G)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/73a	
												STC	Q	3-SR-3.6.1.3.5(HPCI)	
												STO	Q	3-SR-3.6.1.3.5(HPCI)	
3-FCV-73-3	HPCI STM LN OUTBD CNTMT ISOL	3-47E812-1 / G-6	A	ACT	1	10	GA	MO	O	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(G)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/73a	
												STC	Q	3-SR-3.6.1.3.5(HPCI)	
												STO	Q	3-SR-3.6.1.3.5(HPCI)	
3-FCV-73-6A	HPCI STM LN TO COND DRN	3-47E812-1 / E-2	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y		
												FSC	Q		
												STC	Q		
												STO	Q		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-73-6B	HPCI STM LN TO COND DRN	3-47E812-1 / E-2	B	ACT	2	1	GL	AO	O	O/C	C	RPI FSC STC STO	2Y Q Q Q		
3-FCV-73-16	HPCI TRB STM SPLY VLV	3-47E812-1 / G-3	B	ACT	2	10	GA	MO	C	O	FAI	RPI STO	2Y Q	3-SR-3.3.3.1.4(G) 3-SR-3.6.1.3.5(HPCI)	
3-ISV-73-23	HPCI TRB EXHAUST VLV	3-47E812-1 / E-7	A/C	ACT	2	16	SCK	SA	C	O/C	N/A	LTJ CM	AppJ CM	3-SI-4.7.A.2.g-3/73b 3-SI-3.2.3 3-SR-3.5.1.7 3-SR-3.5.1.7(COMP)	
3-FCV-73-26	PSC TO HPCI INBD ISOL	3-47E812-1 / B-6	B	ACT	2	16	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(G) 3-SR-3.6.1.3.5(HPCI) 3-SR-3.6.1.3.5(HPCI)	
3-FCV-73-27	PSC TO HPCI OUTBD ISOL	3-47E812-1 / G-5	B	ACT	2	16	GA	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(G) 3-SR-3.6.1.3.5(HPCI) 3-SR-3.6.1.3.5(HPCI)	
3-FCV-73-30	HPCI PMP MIN FLOW	3-47E812-1 / D-5	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(G) 3-SR-3.6.1.3.5(HPCI) 3-SR-3.6.1.3.5(HPCI)	
3-FCV-73-34	HPCI INJ OUTBD ISOL	3-47E812-1 / F-5	B	PASS	2	14	GA	MO	O/C	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(G)	
3-FCV-73-35	HPCI PMP TEST RTN TO CST	3-47E812-1 / F-6	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(G) 3-SR-3.6.1.3.5(HPCI)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-73-40	HPCI PMP SUCTION ISOL	3-47E812-1 / H-4	B	ACT	2	14	GA	MO	O	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(G)	
												STC	Q	3-SR-3.6.1.3.5(HPCI)	
												STO	Q	3-SR-3.6.1.3.5(HPCI)	
3-FCV-73-44	HPCI INJ INBD ISOL	3-47E812-1 / F-6	B	ACT	2	14	GA	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(G)	
												STC	Q	3-SR-3.6.1.3.5(HPCI)	
												STO	Q	3-SR-3.6.1.3.5(HPCI)	
3-FCV-73-45	HPCI TESTABLE CK	3-47E812-1 / F-6	A/C	ACT	1	14	TCK	SA	C	O/C	N/A	RPI	2Y	3-SR-3.6.1.3.5(HPCI RO)	
												LTJ	AppJ		
												CM	CM		
3-FCV-73-64	HPCI TURB EXHAUST VACUUM RELIEF	3-47E812-1 / D-8	B	PASS	2	3	GA	MO	O	O	FAI	NTR	NTR		
3-FCV-73-81	3-FCV-73-3 BYPASS	3-47E812-1 / G-6	A	ACT	1	1	GA	MO	O	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(G)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/73a	
												STC	Q	3-SR-3.6.1.3.5(HPCI)	
3-CKV-73-505	CST TO HPCI PMP INLT	3-47E812-1 / H-4	C	ACT	2	14	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.7 3-SR-3.5.1.7(COMP)	
3-RFV-73-506	HPCI PMP SUCT RLF	3-47E812-1 / G-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-CKV-73-517	PSC TO HPCI PMP INLT CK	3-47E812-1 / B-6	C	ACT	2	16	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(HPCI)	
3-CKV-73-559	HPCI PMP MIN FLOW CHECK	3-47E812-1 / D-5	C	ACT	2	4	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.7 3-SR-3.5.1.7(COMP) 3-SR-3.6.1.3.5(HPCI CM)	
3-RFV-73-574	HPCI PMP GL SL CND	3-47E812-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-SHV-73-587	AUX STEAM SUPPLY SHUTOFF VLV	3-47E812-1 / G-2	B	PASS	2	8	GA	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-73-603	HPCI TRB EXH CHECK	3-47E812-1 / E-7	A/C	ACT	2	16	CK	SA	C	O/C	N/A	LTJ	AppJ	3-SI-4.7.A.2.g-3/73b	
												CM	CM	3-SI-3.2.3 3-SI-4.7.A.2.g-3/73b 3-SR-3.5.1.7 3-SR-3.5.1.7(COMP) 3-SR-3.6.1.3.5(HPCI CM)	
3-CKV-73-625	HPCI PMP GLD SEAL RTN	3-47E812-1 / B-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.7 3-SR-3.5.1.7(COMP)	
3-CKV-73-633	HPCI TRB EXH VAC RLF	3-47E812-1 / D-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(HPCI CM)	
3-CKV-73-634	HPCI TRB EXH VAC RLF	3-47E812-1 / D-8	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(HPCI CM)	
3-CKV-73-635	HPCI TRB EXH VAC RLF	3-47E812-1 / E-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(HPCI CM)	
3-CKV-73-636	HPCI TRB EXH VAC RLF	3-47E812-1 / E-7	C	ACT	2	2	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.6.1.3.5(HPCI CM)	
3-RPD-73-713	HPCI TRB EXH RPD	3-47E812-1 / E-4	D	ACT	2	16	RD	SA	C	O/C	N/A	RD	RV	3-SI-3.2.19	
3-FCV-74-1	RHR PMP A PSC SUCTION	3-47E811-1 / B-5	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q	3-SR-3.6.1.3.5(RHR I)	
												STO	Q	3-SR-3.6.1.3.5(RHR I)	
3-FCV-74-2	RHR PMP A SD CLG SUCTION	3-47E811-1 / C-6	B	ACT	2	20	GA	MO	C	C	FAI	RPI	2Y		
												STC	Q		
3-FCV-74-7	RHR LOOP I MIN FLOW	3-47E811-1 / E-6	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q	3-SR-3.6.1.3.5(RHR I)	
												STO	Q	3-SR-3.6.1.3.5(RHR I)	
3-SHV-74-11	RHR PUMP A CNDS SUCTION SOV	3-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(H I)	
3-FCV-74-12	RHR PMP C PSC SUCTION	3-47E811-1 / D-5	B	ACT	2	24	GA	MO	O	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q	3-SR-3.6.1.3.5(RHR I)	
												STO	Q	3-SR-3.6.1.3.5(RHR I)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-74-13	RHR PMP C SD CLG SUCTION	3-47E811-1 / D-6	B	ACT	2	20	GA	MO	C	C	FAI	RPI STC	2Y Q		
3-SHV-74-23	RHR PUMP C CNDS SUCTION SOV	3-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(H I)	
3-FCV-74-24	RHR PMP B PSC SUCTION	3-47E811-1 / B-4	B	ACT	2	24	GA	MO	O	O	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(H II) 3-SR-3.6.1.3.5(RHR II) 3-SR-3.6.1.3.5(RHR II)	
3-FCV-74-25	RHR PMP B SD CLG SUCTION	3-47E811-1 / C-4	B	ACT	2	20	GA	MO	C	C	FAI	RPI STC	2Y Q		
3-FCV-74-30	RHR LOOP II MIN FLOW	3-47E811-1 / E-3	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(H II) 3-SR-3.6.1.3.5(RHR II) 3-SR-3.6.1.3.5(RHR II)	
3-SHV-74-34	RHR PUMP B CNDS SUCTIONSOV	3-47E811-1 / B-4	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(H II)	
3-FCV-74-35	RHR PMP D PSC SUCTION	3-47E811-1 / D-4	B	ACT	2	24	GA	MO	O	O	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(H II) 3-SR-3.6.1.3.5(RHR II) 3-SR-3.6.1.3.5(RHR II)	
3-FCV-74-36	RHR PMP D SD CLG SUCTION	3-47E811-1 / D-4	B	ACT	2	20	GA	MO	C	C	FAI	RPI STC	2Y Q		
3-SHV-74-45	RHR PUMP D CNDS SUCTION SOV	3-47E811-1 / B-5	B	PASS	2	16	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(H II)	
3-FCV-74-46	RHR SYS I-II CROSSTIE VLV	3-47E811-1 / D-7	B	PASS	2	24	GA	MO	O/C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(HCT)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-74-47	RHR SD CLG OUTBD ISOL	3-47E811-1 / E-5	A	ACT	1	20	GA	MO	C	C	FAI	LTP	2Y	3-SI-3.2.74(SDC)	PIV
												RPI	2Y		
												LTJ	AppJ		
												STC	CSD	3-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	3-SR-3.6.1.3.5(RHR CSD)	DTJ-7
3-FCV-74-48	RHR SD CLG INBD ISOL	3-47E811-1 / F-5	A	ACT	1	20	GA	MO	C	C	FAI	LTP	2Y	3-SI-3.2.74(SDC)	PIV
												RPI	2Y		
												LTJ	AppJ		
												STC	CSD	3-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	3-SR-3.6.1.3.5(RHR CSD)	DTJ-7
3-FCV-74-52	RHR LOOP I THROTTLE	3-47E811-1 / F-7	B	ACT	2	24	ANG	MO	O/C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q		
												STO	Q	3-SR-3.6.1.3.5(RHR I)	
3-FCV-74-53	RHR LOOP I INJ	3-47E811-1 / F-6	A	ACT	1	24	GA	MO	C	O/C	FAI	LTP	2Y	3-SI-3.2.74(RHR I)	, PIV
												RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	CSD	3-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	3-SR-3.6.1.3.5(RHR CSD)	DTJ-7
3-CKV-74-54	RHR LOOP I CKV	3-47E811-1 / F-6	A/C	ACT	1	24	CK	SA	C	O/C	N/A	LTP	2Y	3-SI-3.2.74(RHR I)	PIV,
												CVC	RO	3-SI-3.2.74(RHR I)	DTJ-2
												CVO	RO	3-SI-3.2.21(I)	DTJ-2
3-FCV-74-57	RHR LOOP I PSC RTN	3-47E811-1 / G-8	B	ACT	2	18	GA	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q	3-SR-3.6.1.3.5(RHR I)	
												STO	Q	3-SR-3.6.1.3.5(RHR I)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-74-58	RHR LOOP I PSC SPRAY	3-47E811-1 / F-8	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q	3-SR-3.6.1.3.5(RHR I)	
												STO	Q	3-SR-3.6.1.3.5(RHR I)	
3-FCV-74-59	RHR LOOP I PMP TEST RTN	3-47E811-1 / F-8	B	ACT	2	12	GL	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q	3-SR-3.6.1.3.5(RHR I)	
												STO	Q	3-SR-3.6.1.3.5(RHR I)	
3-FCV-74-60	RHR LP I CNTMT SPRAY OUTBD ISOL	3-47E811-1 / G-6	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q	3-SR-3.6.1.3.5(RHR I)	
												STO	Q	3-SR-3.6.1.3.5(RHR I)	
3-FCV-74-61	RHR LP I CNTMT SPRAY INBD ISOL	3-47E811-1 / G-5	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
												STC	Q	3-SR-3.6.1.3.5(RHR I)	
												STO	Q	3-SR-3.6.1.3.5(RHR I)	
3-FCV-74-66	RHR LOOP II THROTTLE	3-47E811-1 / F-3	B	ACT	2	24	ANG	MO	O/C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H II)	
												STC	Q		
												STO	Q	3-SR-3.6.1.3.5(RHR CSD)	
3-FCV-74-67	RHR LOOP II INJ	3-47E811-1 / F-3	A	ACT	1	24	GA	MO	C	O/C	FAI	LTP	2Y	3-SI-3.2.74(RHR II)	, PIV
												RPI	2Y	3-SR-3.3.3.1.4(H II)	
												STC	CSD	3-SR-3.6.1.3.5(RHR CSD)	DTJ-7
												STO	CSD	3-SR-3.6.1.3.5(RHR CSD)	DTJ-7
3-CKV-74-68	RHR LOOP II CKV	3-47E811-1 / F-4	A/C	ACT	1	24	CK	SA	C	O/C	N/A	LTP	2Y	3-SI-3.2.74(RHR II)	PIV,
												CVC	RO	3-SI-3.2.74(RHR II)	DTJ-2
												CVO	RO	3-SI-3.2.21(II)	DTJ-2

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-74-71	RHR LOOP II PSC RTN	3-47E811-1 / G-2	B	ACT	2	18	GA	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H II)	
												STC	Q	3-SR-3.6.1.3.5(RHR II)	
												STO	Q	3-SR-3.6.1.3.5(RHR II)	
3-FCV-74-72	RHR LOOP II PSC SPRAY	3-47E811-1 / F-2	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H II)	
												STC	Q	3-SR-3.6.1.3.5(RHR II)	
												STO	Q	3-SR-3.6.1.3.5(RHR II)	
3-FCV-74-73	RHR LOOP II PMP TEST RTN	3-47E811-1 / F-2	B	ACT	2	12	GL	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H II)	
												STC	Q	3-SR-3.6.1.3.5(RHR II)	
												STO	Q	3-SR-3.6.1.3.5(RHR II)	
3-FCV-74-74	RHR LP II CNTMT SPRAY OUTBD ISOL	3-47E811-1 / G-4	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H II)	
												STC	Q	3-SR-3.6.1.3.5(RHR II)	
												STO	Q	3-SR-3.6.1.3.5(RHR II)	
3-FCV-74-75	RHR LP II CNTMT SPRAY INBD ISOL	3-47E811-1 / G-5	B	ACT	2	12	GA	MO	C	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H II)	
												STC	Q	3-SR-3.6.1.3.5(RHR II)	
												STO	Q	3-SR-3.6.1.3.5(RHR II)	
3-SHV-74-91	RHR TO FUEL POOL F/D SOV	3-47E811-1 / D-6	B	PASS	2	8	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(HCT)	
3-FCV-74-96	RHR PMP A SUCTION XTIE	3-47E811-1 / C-5	B	PASS	2	14	GA	MO	C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
3-FCV-74-97	RHR PMP C SUCTION XTIE	3-47E811-1 / C-5	B	PASS	2	14	GA	MO	C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
3-FCV-74-100	RHR HTX A-C XTIE TO U2 B-D RHR HTX	3-47E811-1 / C-8	B	PASS	2	10	GA	MO	C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(H I)	
3-SHV-74-150	RHR SYS I & II DISCH CROSSTIE SOV	3-47E811-1 / D-3	B	PASS	2	24	GA	M	O/C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(HCT)	
3-SMV-74-226	RHR PMP SUCT SMPL VLV	3-47E811-1 / C-4	B	PASS	2	0.25	GL	M	LC	C	N/A	NTR	NTR		
3-SMV-74-227	RHR PMP SUCT SMPL VLV	3-47E811-1 / C-4	B	PASS	2	0.25	GL	M	LC	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-RFV-74-509A	RHR PMP A SUCT RLF	3-47E811-1 / B-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-74-509B	RHR PMP B SUCT RLF	3-47E811-1 / B-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-74-509C	RHR PMP C SUCT RLF	3-47E811-1 / D-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-74-509D	RHR PMP D SUCT RLF	3-47E811-1 / D-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-CKV-74-559A	RHR PMP A DISCH CK	3-47E811-1 / B-7	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	3-SR-3.5.1.6(RHR I) 3-SR-3.5.1.6(RHR I-COMP) 3-SR-3.5.1.6(RHR I) 3-SR-3.5.1.6(RHR I-COMP)	
3-CKV-74-559B	RHR PMP B DISCH CK	3-47E811-1 / B-3	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	3-SR-3.5.1.6(RHR II) 3-SR-3.5.1.6(RHR II-COMP) 3-SR-3.5.1.6(RHR II) 3-SR-3.5.1.6(RHR II-COMP)	
3-CKV-74-559C	RHR PMP C DISCH CK	3-47E811-1 / D-7	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	3-SR-3.5.1.6(RHR I) 3-SR-3.5.1.6(RHR I-COMP) 3-SR-3.5.1.6(RHR I) 3-SR-3.5.1.6(RHR I-COMP)	
3-CKV-74-559D	RHR PMP D DISCH CK	3-47E811-1 / D-3	C	ACT	2	20	CK	SA	C	O/C	N/A	CVC CVO	Q Q	3-SR-3.5.1.6(RHR II) 3-SR-3.5.1.6(RHR II-COMP) 3-SR-3.5.1.6(RHR II) 3-SR-3.5.1.6(RHR II-COMP)	
3-CKV-74-560A	RHR PMP A MIN FLOW CK	3-47E811-1 / B-6	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.6(RHR I) 3-SR-3.5.1.6(RHR I-COMP)	
3-CKV-74-560B	RHR PMP B MIN FLOW CK	3-47E811-1 / B-3	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.6(RHR II) 3-SR-3.5.1.6(RHR II-COMP)	
3-CKV-74-560C	RHR PMP C MIN FLOW CK	3-47E811-1 / D-7	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.6(RHR I) 3-SR-3.5.1.6(RHR I-COMP)	
3-CKV-74-560D	RHR PMP D MIN FLOW CK	3-47E811-1 / D-3	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.6(RHR II) 3-SR-3.5.1.6(RHR II-COMP)	
3-RFV-74-578A	RHR HTX A RLF	3-47E811-1 / B-7	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-74-578B	RHR HTX B RLF	3-47E811-1 / B-2	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-74-578C	RHR HTX C RLF	3-47E811-1 / C-8	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	

Appendix B - Valve Test Plan

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-RFV-74-578D	RHR HTX D RLF	3-47E811-1 / C-2	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-74-587A	RHR LP I DISCH RLF	3-47E811-1 / G-7	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-74-587B	RHR LP II DISCH RLF	3-47E811-1 / G-3	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-74-659	RHR SDC SPLY RLF	3-47E811-1 / E-5	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-CKV-74-661	RHR THERMAL RLF CK	3-47E811-1 / F-5	A/C	ACT	1	0.75	CK	SA	C	O/C	N/A	LTP LTJ CVC CVO	2Y AppJ RO RO	3-SI-3.2.74(SDC) 3-SI-3.2.74(SDC) 3-SI-3.2.74(SDC)	PIV : Series Pair DTJ-2 DTJ-2
3-CKV-74-662	RHR THERMAL RLF CK	3-47E811-1 / F-5	A/C	ACT	1	0.75	CK	SA	C	O/C	N/A	LTP LTJ CVC CVO	2Y AppJ RO RO	3-SI-3.2.74(SDC) 3-SI-3.2.74(SDC) 3-SI-3.2.74(SDC)	PIV : Series Pair DTJ-2 DTJ-2
3-SHV-74-670	CNDS FLUSH AND FILL TO SDC SPLY SHUTOFFF VLV	3-47E811-1 / E-5	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
3-SHV-74-675	CNDS FLUSH & FILL TO DW SPRAY HDR SHUTOFF VLV	3-47E811-1 / H-6	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
3-SHV-74-681A	CNDS FLUSH & FILL TO RHR/SDC RTN SOV	3-47E811-1 / F-7	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
3-SHV-74-681B	CNDS FLUSH & FILL TO RHR/SDC RTN SOV	3-47E811-1 / F-3	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
3-SHV-74-699	CNDS FLUSH & FILL TO HEAD SPRAY LN SOV	3-47E811-1 / H-3	B	PASS	2	4	GL	M	C	C	N/A	NTR	NTR		
3-CKV-74-706	CNDS FILL TO HEAD SPRAY CHECK VLV	3-47E811-1 / H-4	C	ACT	2	1	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.14(I)	
3-DRV-74-722	PSC DRAIN ISOLATION	3-47E811-1 / E-4	B	PASS	2	8	GA	M	C	C	N/A	NTR	NTR		

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-74-792	RHR LP II KEEP FILL CK	3-47E811-1 / H-6	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.14 3-SI-3.2.14(II) 3-SI-3.2.31	
3-CKV-74-802	RHR LP I KEEP FILL CK	3-47E811-1 / H-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.14 3-SI-3.2.14(I) 3-SI-3.2.31	
3-CKV-74-803	RHR LP I KEEP FILL CK	3-47E811-1 / H-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.14 3-SI-3.2.14(I) 3-SI-3.2.31	
3-CKV-74-804	RHR LP II KEEP FILL CK	3-47E811-1 / H-6	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.14 3-SI-3.2.14(II) 3-SI-3.2.31	
3-BYV-74-828	CNDS FLUSH & FILL TO DW SPRAY BYPASS VLV	3-47E811-1 / G-7	B	PASS	2	1	GL	M	C	C	N/A	NTR	NTR		
3-SHV-75-3	CS PMP 3A CNDS SUCT SHUTOFF VLV	3-47E814-1 / A-5	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(I/1)	
3-FCV-75-9	CS LOOP I MIN FLOW	3-47E814-1 / F-5	B	ACT	2	3	GA	MO	O	O/C	FAI	RPI STC STO	2Y Q Q	3-SR-3.3.3.1.4(I/1) 3-SR-3.6.1.3.5(CS I) 3-SR-3.6.1.3.5(CS I)	
3-SHV-75-12	CS PMP 3C CNDS SUCT SHUTOFF VLV	3-47E814-1 / A-5	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(I/1)	
3-FCV-75-22	CS LOOP I PMP TEST	3-47E814-1 / F-5	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI STC	2Y Q	3-SR-3.3.3.1.4(I/1) 3-SR-3.5.1.6(CS I) 3-SR-3.5.1.6(CS I-COMP)	
3-FCV-75-23	CS LOOP I INJ	3-47E814-1 / F-6	B	PASS	2	12	GA	MO	O	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(I/1)	
3-FCV-75-25	CS LOOP I INJ	3-47E814-1 / F-6	A	ACT	1	12	GA	MO	C	O/C	FAI	LTP RPI STC STO	2Y 2Y CSD CSD	3-SI-3.2.75(CS I) 3-SR-3.3.3.1.4(I/1) 3-SR-3.6.1.3.5(CS CSD) 3-SR-3.6.1.3.5(CS CSD)	, PIV DTJ-7 DTJ-7

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-75-26	CS LOOP I TESTABLE CK	3-47E814-1 / F-7	A/C	ACT	1	12	CK	SA	C	O/C	N/A	LTP	2Y	3-SI-3.2.75(CS I)	PIV,
												CVC	RO	3-SI-3.2.27(I)	DTJ-2
												CVO	RO	3-SI-3.2.75(CS I) 3-SI-3.2.27(I)	DTJ-2
3-ECKV-75-28	EXCESS FLOW CKV TO 3-PDIS-75-28	3-47E814-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	
3-SHV-75-31	CS PMP 3B CNDS SUCT SHUTOFF VLV	3-47E814-1 / A-3	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(I/2)	
3-FCV-75-37	CS LOOP II MIN FLOW	3-47E814-1 / F-4	B	ACT	2	3	GA	MO	O	O/C	FAI	RPI	2Y	3-SR-3.3.3.1.4(I/2)	
												STC	Q	3-SR-3.6.1.3.5(CS II)	
												STO	Q	3-SR-3.6.1.3.5(CS II)	
3-SHV-75-40	CS PMP 3D CNDS SUCT SHUTOFF VLV	3-47E814-1 / A-3	B	PASS	2	14	GA	M	C	C	N/A	RPI	2Y	3-SR-3.3.3.1.4(I/2)	
3-FCV-75-50	CS LOOP II PMP TEST	3-47E814-1 / F-4	B	ACT	2	10	GL	MO	O/C	C	FAI	RPI	2Y	3-SR-3.3.3.1.4(I/2)	
												STC	Q	3-SR-3.5.1.6(CS II) 3-SR-3.5.1.6(CS II-COMP)	
3-FCV-75-51	CS LOOP II INJ	3-47E814-1 / G-6	B	PASS	2	12	GA	MO	O	O	FAI	RPI	2Y	3-SR-3.3.3.1.4(I/2)	
3-FCV-75-53	CS LOOP II INJ	3-47E814-1 / G-6	A	ACT	1	12	GA	MO	C	O/C	FAI	LTP	2Y	3-SI-3.2.75(CS II)	, PIV
												RPI	2Y	3-SR-3.3.3.1.4(I/2)	
												STC	CSD	3-SR-3.6.1.3.5(CS CSD)	DTJ-7
												STO	CSD	3-SR-3.6.1.3.5(CS CSD)	DTJ-7
3-CKV-75-54	CS LOOP II TESTABLE CK	3-47E814-1 / G-7	A/C	ACT	1	12	CK	SA	C	O/C	N/A	LTP	2Y	3-SI-3.2.75(CS II)	PIV,
												CVC	RO	3-SI-3.2.27(II)	DTJ-2
												CVO	RO	3-SI-3.2.75(CS II) 3-SI-3.2.27(II)	DTJ-2
3-ECKV-75-56	EXCESS FLOW CKV TO 3-PDIS-75-28	3-47E814-1 / G-6	C	ACT	2	1	XCK	SA	O	O/C	N/A	CM	CM	3-SR-3.6.1.3.8(2)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-75-57	CS DRN PMP A INBD ISOL	3-47E814-1 / B-4	B	ACT	2	3	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(I/1)	
												FSC	Q	3-SR-3.6.1.3.5(CS I)	
												STC	Q	3-SR-3.6.1.3.5(CS I)	
3-FCV-75-58	CS DRN PMP A OUTBD ISOL	3-47E814-1 / B-5	B	ACT	2	3	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(I/1)	
												FSC	Q	3-SR-3.6.1.3.5(CS I)	
												STC	Q	3-SR-3.6.1.3.5(CS I)	
3-RFV-75-507A	CS PMP A SUCT RLF	3-47E814-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-75-507B	CS PMP B SUCT RLF	3-47E814-1 / C-2	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-75-507C	CS PMP C SUCT RLF	3-47E814-1 / C-6	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-75-507D	CS PMP D SUCT RLF	3-47E814-1 / C-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-CKV-75-537A	CS PMP A DISCH CK	3-47E814-1 / D-4	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC	Q	3-SR-3.5.1.6(CS I) 3-SR-3.5.1.6(CS I-COMP)	
												CVO	Q	3-SR-3.5.1.6(CS I) 3-SR-3.5.1.6(CS I-COMP)	
3-CKV-75-537B	CS PMP B DISCH CK	3-47E814-1 / D-3	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC	Q	3-SR-3.5.1.6(CS II) 3-SR-3.5.1.6(CS II-COMP)	
												CVO	Q	3-SR-3.5.1.6(CS II) 3-SR-3.5.1.6(CS II-COMP)	
3-CKV-75-537C	CS PMP C DISCH CK	3-47E814-1 / D-6	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC	Q	3-SR-3.5.1.6(CS I) 3-SR-3.5.1.6(CS I-COMP)	
												CVO	Q	3-SR-3.5.1.6(CS I) 3-SR-3.5.1.6(CS I-COMP)	
3-CKV-75-537D	CS PMP D DISCH CK	3-47E814-1 / D-4	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC	Q	3-SR-3.5.1.6(CS II) 3-SR-3.5.1.6(CS II-COMP)	
												CVO	Q	3-SR-3.5.1.6(CS II) 3-SR-3.5.1.6(CS II-COMP)	
3-RFV-75-543A	CS LP I DISCH RLF	3-47E814-1 / E-4	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-RFV-75-543B	CS LP II DISCH RLF	3-47E814-1 / E-3	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	RV	3-SI-3.2.9	
3-CKV-75-570A	CS PMP A MIN FLOW CK	3-47E814-1 / D-5	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.6(CS I) 3-SR-3.5.1.6(CS I-COMP)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-75-570B	CS PMP B MIN FLOW CK	3-47E814-1 / D-2	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.6(CS II) 3-SR-3.5.1.6(CS II-COMP)	
3-CKV-75-570C	CS PMP C MIN FLOW CK	3-47E814-1 / D-6	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.6(CS I) 3-SR-3.5.1.6(CS I-COMP)	
3-CKV-75-570D	CS PMP D MIN FLOW CK	3-47E814-1 / D-4	C	ACT	2	3	CK	SA	C	O/C	N/A	CM	CM	3-SI-3.2.3 3-SR-3.5.1.6(CS II) 3-SR-3.5.1.6(CS II-COMP)	
3-CKV-75-580A	CNDS FLUSH & FILL CHECK VLV	3-47E814-1 / G-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.15(I)	
3-CKV-75-580B	CNDS FLUSH & FILL CHECK VLV	3-47E814-1 / H-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.15(I) 3-SI-3.2.15(II)	
3-CKV-75-606	CS LP I KEEP FILL CK	3-47E814-1 / F-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.15 3-SI-3.2.15(I)	
3-CKV-75-607	CS LP I KEEP FILL CK	3-47E814-1 / F-5	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.15 3-SI-3.2.15(I)	
3-CKV-75-609	CS LP II KEEP FILL CK	3-47E814-1 / H-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.15 3-SI-3.2.15(II)	
3-CKV-75-610	CS LP II KEEP FILL CK	3-47E814-1 / H-4	C	ACT	2	2	CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.15 3-SI-3.2.15(II)	
3-FCV-77-2A	DW FLOOR DRN SUMP INBD ISOL	3-47E852-1 / C-4	A	ACT	2	3	BA	AO	O	C	C	RPI LTJ FSC STC	2Y AppJ Q Q	3-SR-3.3.3.1.4(J) 3-SI-4.7.A.2.g-3/77a 3-SR-3.6.1.3.5(77) 3-SR-3.6.1.3.5(77)	
3-FCV-77-2B	DW FLOOR DRN SUMP OUTBD ISOL	3-47E852-1 / C-4	A	ACT	2	3	BA	AO	O	C	C	RPI LTJ FSC STC	2Y AppJ Q Q	3-SR-3.3.3.1.4(J) 3-SI-4.7.A.2.g-3/77a 3-SR-3.6.1.3.5(77) 3-SR-3.6.1.3.5(77)	

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-FCV-77-15A	DW EQ DRN SUMP INBD ISOL	3-47E852-2 / D-3	A	ACT	2	3	BA	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(J)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/77b	
												FSC	Q	3-SR-3.6.1.3.5(77)	
												STC	Q	3-SR-3.6.1.3.5(77)	
3-FCV-77-15B	DW EQ DRN SUMP OUTBD ISOL	3-47E852-2 / D-3	A	ACT	2	3	BA	AO	O	C	C	RPI	2Y	3-SR-3.3.3.1.4(J)	
												LTJ	AppJ	3-SI-4.7.A.2.g-3/77b	
												FSC	Q	3-SR-3.6.1.3.5(77)	
												STC	Q	3-SR-3.6.1.3.5(77)	
3-FCV-78-61	RHR TO FPC SUPPLY	3-47E855-1 / H-6	B	PASS	2	6	GA	MO	C	C	FAI	RPI	2Y	3-SI-3.2.10.P	
3-FCV-85-37C	SDIV DRN ISOL WEST	3-47E820-6 / A-6	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.2.1(85)	
												FSC	Q	3-SR-3.1.8.2	
												STC	Q	3-SR-3.1.8.2	
3-FCV-85-37E	SDIV DRN ISOL EAST	3-47E820-6 / A-3	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.2.1(85)	
												FSC	Q	3-SR-3.1.8.2	
												STC	Q	3-SR-3.1.8.2	
3-FCV-85-82A	SCRM DISCH HDR VT W	3-47E820-6 / G-7	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.2.1(85)	
												FSC	Q	3-SR-3.1.8.2	
												STC	Q	3-SR-3.1.8.2	
3-FCV-85-83A	SCRM DISCH HDR VT E	3-47E820-6 / G-3	B	ACT	2	2	GL	AO	O	C	C	RPI	2Y	3-SR-3.3.3.2.1(85)	
												FSC	Q	3-SR-3.1.8.2	
												STC	Q	3-SR-3.1.8.2	
3-CKV-85-589	CHARGING WTR CHK (185 TOTAL)	3-47E820-2 / D-9	C	ACT	2	0.5	CK	SA	O/C	C	N/A	BDO	RO	3-SI-3.2.18	DTJ-3
												CVC	RO	3-SI-3.2.18	DTJ-3

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VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
3-CKV-85-806A	CRD BACKFILL LINE CHECK VLV	3-47E810-1 / D-6	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.31	
3-CKV-85-806B	CRD BACKFILL LINE CHECK VLV	3-47E810-1 / D-6	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.31	
3-CKV-85-806C	CRD BACKFILL LINE CHECK VLV	3-47E810-1 / C-6	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.31	
3-CKV-85-806D	CRD BACKFILL LINE CHECK VLV	3-47E810-1 / C-6	C	ACT	2		CK	SA	O/C	C	N/A	CM	CM	3-SI-3.2.3 3-SI-3.2.31	

Appendix C - Deferred Test Justifications

Deferred Test Justification: DTJ-1

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-CKV-3-554	FDWTR LN A OUTBD ISOL	1-47E803-1 / G-6	A/C	Active	1	24	CK	SA
1-CKV-3-558	FDWTR LN A INBD ISOL	1-47E803-1 / G-7	A/C	Active	1	24	CK	SA
1-CKV-3-568	FDWTR LN B OUTBD ISOL	1-47E803-1 / F-6	A/C	Active	1	24	CK	SA
1-CKV-3-572	FDWTR LN B INBD ISOL	1-47E803-1 / F-6	A/C	Active	1	24	CK	SA
2-CKV-3-554	FDWTR LN A OUTBD ISOL	2-47E803-1 / H-6	A/C	Active	1	24	CK	SA
2-CKV-3-558	FDWTR LN A INBD ISOL	2-47E803-5 / F-5	A/C	Active	1	24	CK	SA
2-CKV-3-568	FDWTR LN B OUTBD ISOL	2-47E803-1 / F-6	A/C	Active	1	24	CK	SA
2-CKV-3-572	FDWTR LN B INBD ISOL	2-47E803-5 / E-5	A/C	Active	1	24	CK	SA
3-CKV-3-554	FDWTR LN A OUTBD ISOL	3-47E803-1 / G-6	A/C	Active	1	24	CK	SA
3-CKV-3-558	FDWTR LN A INBD ISOL	3-47E803-1 / G-7	A/C	Active	1	24	CK	SA
3-CKV-3-568	FDWTR LN B OUTBD ISOL	3-47E803-1 / F-6	A/C	Active	1	24	CK	SA
3-CKV-3-572	FDWTR LN B INBD ISOL	3-47E803-1 / F-6	A/C	Active	1	24	CK	SA
3-CKV-69-628	RWCU TO FDWTR ISOL	3-47E810-1 / F-6	A/C	Active	1	4	CK	SA

Required Test Frequency:

Valves CKV-3-554/568 and (U1) CKV-69-629, (U2) CKV-69-630, (U3) CKV-69-628 and CKV-69-629
- Check Valve Closure (CVC) on a Quarterly (Q) frequency
- Check Valve Bi-directional Open (BDO) on a Quarterly (Q) frequency

Valves CKV-3-558/572
- Check Valve Closure (CVC) on a Quarterly (Q) frequency
- Check Valve Open (CVO) on a Quarterly (Q) frequency

Deferred Test Frequency:

Valves CKV-3-554/568 and (U1) CKV-69-629, (U2) CKV-69-630, (U3) CKV-69-628 and CKV-69-629
- Check Valve Closure (CVC) on a Refueling Outage (RO) frequency
- Check Valve Bi-directional Open (BDO) on a Refueling Outage (RO) frequency

Valves CKV-3-558/572
- Check Valve Closure (CVC) on a Refueling Outage (RO) frequency
- Check Valve Open (CVO) on a Refueling Outage (RO) frequency

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Justification for Deferred Test Frequency:

It is impractical exercise test the Feedwater system check valves (CKV-3-554, 558, 568, and 572) to the close position during power operations because the resulting loss of Feedwater flow to the reactor vessel could cause a severe transient possibly resulting in a unit trip.

It is impractical to exercise test the High Pressure Coolant (HPCI) system injection check valve (FCV-73-45) and Reactor Core Isolation Cooling (RCIC) system injection check valve (FCV-71-40) to the open position using flow during power operations because it would be considered an ECCS injection. These check valves are equipped with air actuators to facilitate open exercise testing without system flow. However, the air actuators are disconnected during power operations to ensure there is no interference with valve opening if needed for ECCS purposes. In addition, Feedwater system flow would have to be isolated in order to reduce the differential pressure across the valve to allow exercise testing using the air actuator.

It is impractical to exercise test the Reactor Water Cleanup (RWCU) system check valves (CKV-69-628, CKV-69-629, CKV-69-630) to the close position during power operations because it requires entry into a locked high radiation room and setup test equipment to perform a reverse flow test (reference: NUREG-1482, Section 4.1.6).

The open and close exercise tests need only be performed at an interval when it is practicable to perform both tests. Therefore, both the open exercise tests (BDO and CVO) and close tests (CVC) will be performed at a refueling outage frequency.

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Deferred Test Justification: DTJ-11

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-PCV-1-147	MS STM SEAL ISOL	1-47E807-2 / G-4	B	Active	2	4	ANG	AO
2-PCV-1-147	MS STM SEAL ISOL	2-47E807-2 / C-6	B	Active	2	4	ANG	AO
3-PCV-1-147	MS STM SEAL ISOL	3-47E807-2 / D-6	B	Active	2	4	ANG	AO

Required Test Frequency: Valves 1, 2, and 3-PCV-1-147
• Fail Safe Closed (FSC) and Stroke Time Closed (STC) on a quarterly (Q) frequency

Deferred Test Frequency: Valves 1, 2, and 3-PCV-1-147
• Fail Safe Closed (FSC) and Stroke Time Closed (STC) on a Cold Shutdown (CSD) frequency

Justification for Deferred Test Frequency: 1, 2, and 3-PCV-1-147
These valves are normally closed when the unit is operating above 25% power. Because they are boundary valves for the MSIV Alternate Leakage Path and they will open between 0% to 25% power, to provide steam to the turbine steam seals, it is necessary to verify that they close when needed. Opening these valves in order to stroke time them closed during operation would be a radiological and safety hazard for personnel. These valves will be tested on a cold shutdown basis.

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Deferred Test Justification: DTJ-12

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-FCV-1-145	STM SEAL BYPASS ISOL	1-47E807-2 / H-4	B	Active	2	4	GL	MO
2-FCV-1-145	STM SEAL BYPASS ISOL	2-47E807-2 / C-6	B	Active	2	4	GL	MO
3-FCV-1-145	STM SEAL BYPASS ISOL	3-47E807-2 / C-6	B	Active	2	4	GL	MO

Required Test Frequency: Valves 1, 2, and 3-FCV-1-145
• Stroke Time Closed (STC) on a quarterly (Q) frequency

Deferred Test Frequency: Valves 1, 2, and 3-FCV-1-145
• Stroke Time Closed (STC) on a Cold Shutdown (CSD) frequency

Justification for Deferred Test Frequency: 1, 2, and 3-FCV-1-145
These valves are normally closed, but, can be used to bypass steam flow through PCV-1-147 during plant startup (1-OI-47C) or following loss of control air to PCV-1-147 (AOI-32-2) and therefore the valves may be open. Because they are boundary valves for the MSIV Alternate Leakage Path and they may be open, as described above, it is necessary to verify that they close when needed. Opening these valves in order to stroke time them closed during operation would be a radiological and safety hazard for personnel. These valves will be tested on a cold shutdown basis.

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Deferred Test Justification: DTJ-2

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-CKV-74-54	RHR LP I CKV	1-47E811-1 / F-6	A/C	Active	1	24	CK	SA
1-CKV-74-661	RHR THERMAL RLF	1-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
1-CKV-74-662	RHR THERMAL RLF	1-47E811-1 / D-8	A/C	Active	1	0.75	CK	SA
1-CKV-74-68	RHR LP II CKV	1-47E811-1 / F-4	A/C	Active	1	24	CK	SA
1-CKV-75-26	CS LP I CKV	1-47E814-1 / F-7	A/C	Active	1	12	CK	SA
1-CKV-75-54	CS LP II CKV	1-47E814-1 / G-7	A/C	Active	1	12	CK	SA
2-CKV-74-54	RHR SYSTEM I CHECK VAVLE	2-47E811-1 / F-6	A/C	Active	1	24	CK	SA
2-CKV-74-661	RHR TRCV	2-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
2-CKV-74-662	RHR TRCV	2-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
2-CKV-74-68	RHR SYSTEM II CHECK VALVE	2-47E811-1 / F-4	A/C	Active	1	24	CK	SA
2-CKV-75-26	CS LP I CK	2-47E814-1 / F-7	A/C	Active	1	12	CK	SA
2-CKV-75-54	CS LP II CK	2-47E814-1 / G-7	A/C	Active	1	12	CK	SA
3-CKV-74-54	RHR LOOP I CKV	3-47E811-1 / F-6	A/C	Active	1	24	CK	SA
3-CKV-74-661	RHR THERMAL RLF CK	3-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
3-CKV-74-662	RHR THERMAL RLF CK	3-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
3-CKV-74-68	RHR LOOP II CKV	3-47E811-1 / F-4	A/C	Active	1	24	CK	SA
3-CKV-75-26	CS LOOP I TESTABLE CK	3-47E814-1 / F-7	A/C	Active	1	12	CK	SA
3-CKV-75-54	CS LOOP II TESTABLE CK	3-47E814-1 / G-7	A/C	Active	1	12	CK	SA

Required Test Frequency:
- Check Valve Closure (CVC) on a Quarterly (Q) frequency
- Check Valve Open (CVO) on a Quarterly (Q) frequency

Deferred Test Frequency:
- Check Valve Closure (CVC) on a Refueling Outage (RO) frequency
- Check Valve Open (CVO) on a Refueling Outage (RO) frequency

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Justification for Deferred Test Frequency:

It is impractical to exercise test Residual Heat Removal (RHR) system check valves (CKV-74-54 and CKV-74-68) and Core Spray (CS) system check valves (CKV-75-26 and CKV-75-54) to their open position using flow during power operations because the RHR and CS systems are low pressure systems which are not capable of overcoming reactor system pressure. In addition, the associated upstream normally closed power operated valves are equipped with interlocks to prevent them from opening at reactor system pressures greater than 450 psig.

It is impractical to exercise test RHR system check valves (CKV-74-54 and CKV-74-68) and CS system check valves (CKV-75-26 and CKV-75-54) to their close position during power operations because it requires setup test equipment to perform a reverse flow test (reference: NUREG-1482, Section 4.1.6).

It is impractical to exercise test RHR system check valves (CKV-74-661 and CKV-74-662) to the open and close positions during power operations because it requires entry into the drywell and setup test equipment. The drywell is maintained with an inerted containment atmosphere during power operation as required by 10CFR50.44. It is impractical to de-inert the drywell merely to conduct regularly scheduled valve testing during power operations or cold shutdown. (Reference NUREG-1482, Sections 3.1.1.3 and 4.1.6).

The open and close exercise tests need only be performed at an interval when it is practicable to perform both tests. Therefore, both the open exercise tests (CVO) and close tests (CVC) will be performed at a refueling outage frequency.

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Deferred Test Justification: DTJ-3

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-CKV-85-589	CHGING WTR (185 TOTAL)	1-47E820-2 / D-7	C	Active	2	0.5	CK	SA
2-CKV-85-589	CHARGING WTR CHECK (185 TOTAL)	2-47E820-2 / F-3	C	Active	2	0.5	CK	SA
3-CKV-85-589	CHARGING WTR CHK (185 TOTAL)	3-47E820-2 / D-9	C	Active	2	0.5	CK	SA

Required Test Frequency:
- Check Valve Closure (CVC) on a Quarterly (Q) frequency
- Check Valve Bi-directional Open (BDO) on a Quarterly (Q) frequency

Deferred Test Frequency:
- Check Valve Closure (CVC) on a Refueling Outage (RO) frequency
- Check Valve Bi-directional Open (BDO) on a Refueling Outage (RO) frequency

Justification for Deferred Test Frequency:

It is impractical to exercise test Control Rod Drive (CRD) system check valve (CKV-85-589) to the close position during power operations because the CRD pumps must be stopped to depressurize the charging water header. This test should not be performed during power operation because stopping the pumps results in a loss of cooling water to all control rod drive mechanisms, and seal damage could result. Additionally, this test cannot be performed during each cold shutdown because the control rod drive pumps supply seal water to the reactor recirculation pumps, and one of the recirculation pumps is usually kept running. (Reference: NUREG-1482, Section 4.4.6)

The open and close exercise tests need only be performed at an interval when it is practicable to perform both tests. Therefore, both the open exercise tests (BDO) and close tests (CVC) will be performed at a refueling outage frequency.

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Deferred Test Justification: DTJ-4

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-FCV-1-14	MS LN A INBD ISOL	1-47E801-1 / B-6	A	Active	1	26	GL	AO
1-FCV-1-15	MS LN A OUTBD ISOL	1-47E801-1 / B-7	A	Active	1	26	GL	AO
1-FCV-1-26	MS LN B INBD ISOL	1-47E801-1 / C-6	A	Active	1	26	GL	AO
1-FCV-1-27	MS LN B OUTBD ISOL	1-47E801-1 / C-7	A	Active	1	26	GL	AO
1-FCV-1-37	MS LN C INBD ISOL	1-47E801-1 / E-6	A	Active	1	26	GL	AO
1-FCV-1-38	MS LN C OUTBD ISOL	1-47E801-1 / E-7	A	Active	1	26	GL	AO
1-FCV-1-51	MS LN D INBD ISOL	1-47E801-1 / F-6	A	Active	1	26	GL	AO
1-FCV-1-52	MS LN D OUTBD ISOL	1-47E801-1 / E-7	A	Active	1	26	GL	AO
2-FCV-1-14	MS LN A INBD ISOL	2-47E801-1 / G-5	A	Active	1	26	GL	AO
2-FCV-1-15	MS LN A OUTBD ISOL	2-47E801-1 / G-4	A	Active	1	26	GL	AO
2-FCV-1-26	MS LN B INBD ISOL	2-47E801-1 / G-5	A	Active	1	26	GL	AO
2-FCV-1-27	MS LN B OUTBD ISOL	2-47E801-1 / G-4	A	Active	1	26	GL	AO
2-FCV-1-37	MS LN C INBD ISOL	2-47E801-1 / E-5	A	Active	1	26	GL	AO
2-FCV-1-38	MS LN C OUTBD ISOL	2-47E801-1 / E-4	A	Active	1	26	GL	AO
2-FCV-1-51	MS LN D INBD ISOL	2-47E801-1 / E-5	A	Active	1	26	GL	AO
2-FCV-1-52	MS LN D OUTBD ISOL	2-47E801-1 / E-4	A	Active	1	26	GL	AO
3-FCV-1-14	MS LN A INBD ISOL	3-47E801-1 / B-6	A	Active	1	26	GL	AO
3-FCV-1-15	MS LN A OUTBD ISOL	3-47E801-1 / B-7	A	Active	1	26	GL	AO
3-FCV-1-26	MS LN B INBD ISOL	3-47E801-1 / C-6	A	Active	1	26	GL	AO
3-FCV-1-27	MS LN B OUTBD ISOL	3-47E801-1 / C-7	A	Active	1	26	GL	AO
3-FCV-1-37	MS LN C INBD ISOL	3-47E801-1 / E-6	A	Active	1	26	GL	AO
3-FCV-1-38	MS LN C OUTBD ISOL	3-47E801-1 / E-7	A	Active	1	26	GL	AO
3-FCV-1-51	MS LN D INBD ISOL	3-47E801-1 / F-6	A	Active	1	26	GL	AO
3-FCV-1-52	MS LN D OUTBD ISOL	3-47E801-1 / E-7	A	Active	1	26	GL	AO

Required Test Frequency:
- Full stroke exercise with stroke time closed (STC) on a Quarterly (Q) frequency
- Fail safe to closed position (FSC) on a Quarterly (Q) frequency

Deferred Test Frequency:
- Partial stroke exercise to closed position (PSC) on a Quarterly (Q) frequency
- Full stroke exercise with stroke time closed (STC) on a Cold Shutdown (CSD) frequency
- Fail safe to closed position (FSC) on a Cold Shutdown (CSD) frequency for valves in the main steam tunnel
- Fail safe to closed position (FSC) on a Refueling Outage (RO) frequency for valves in drywell

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Justification for Deferred Test Frequency:

It is impractical to exercise and stroke time the Main Steam Isolation Valves (MSIVs) to the closed position during power operation because it isolates flow of one main steam line to the turbine which could cause a severe transient possibly resulting in a unit trip. Additionally, closure of an MSIV at power could potentially result in challenging the setpoint of an MSRV/ADS valve causing inadvertent lifting.

It is impractical to perform fail safe testing of the MSIVs to the close position during power operations for the same reasons as exercise and stroke time close testing stated above. (Reference: NUREG-1482, Section 4.2.6)

It is also impractical to perform fail safe testing of the MSIVs located in the drywell to the close position during cold shutdown conditions because it requires entry into the drywell to vent the normal and backup air supply and the drywell may not be de-inerted. (Reference: NUREG-1482, Sections 3.1.1.3 and 4.2.6)

Therefore, the MSIVs will be partial stroke exercise to the closed position (PSC) on a Quarterly (Q) frequency and full stroke exercised and stroke time closed (STC) on a Cold Shutdown (CSD) frequency as required by Technical Specification SR 3.3.1.1.8, SR 3.6.1.3.6, and Design Criteria BFN-50-7001, Section 5.1(3).

In addition, fail safe testing to the close position (FSC) will be performed for MSIVs located in the Main Steam Tunnel on a cold shutdown frequency and MSIVs located in the drywell on a refueling outage frequency.

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Deferred Test Justification: DTJ-5

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-FCV-68-3	RECIRC PMP A DISCH	1-47E817-1 / D-6	B	Active	1	28	GA	MO
1-FCV-68-79	RECIRC PMP B DISCH	1-47E817-1 / C-4	B	Active	1	28	GA	MO
2-FCV-68-3	RECIRC PMP A DISCH	2-47E817-1 / E-6	B	Active	1	28	GA	MO
2-FCV-68-79	RECIRC PMP B DISCH	2-47E817-1 / D-4	B	Active	1	28	GA	MO
3-FCV-68-3	RECIRC PMP A DISCH	3-47E817-1 / D-6	B	Active	1	28	GA	MO
3-FCV-68-79	RECIRC PMP B DISCH	3-47E817-1 / C-4	B	Active	1	28	GA	MO

Required Test Frequency: Full stroke exercise with stroke time closed (STC) on a Quarterly (Q) frequency

Deferred Test Frequency: Full stroke exercise with stroke time closed (STC) on a Cold Shutdown (CSD) frequency

Justification for Deferred Test Frequency: It is impractical to exercise and stroke time the reactor recirculation pump discharge valves to the closed position during power operation because it requires the associated reactor recirculation pump to be stopped which would cause a severe transient possibly resulting in a unit trip.

It is also impractical to partial exercise these valves for the same reasons stated above.

Technical Specification Surveillance Requirement (SR) 3.5.1.5 requires these valves to be cycled through one complete cycle of full travel when the unit has been in Mode 4 greater than 48 hours and prior to entry into Mode 2.

NUREG-1482, Section 3.1.1.4 provides an adequate basis for deferring the exercise and stroke time close test of these valves to a refueling outage frequency. However, the BFN Technical Specification takes precedence.

Therefore, these valves will be full stroke exercise and stroke time tested to the close position (STC) during cold shutdowns which last more than 48 hours. For the purposes of the IST Program, this will be classified as a cold shutdown frequency. However, testing of these valves is not required to be included in the normal rotation of scheduling cold shutdown frequency valves and will only be tested in cold shutdown when required by Technical Specification SR 3.5.1.5.

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Deferred Test Justification: DTJ-6

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-FCV-70-47	RBCCW RTN CNTMT ISOL	1-47E822-1 / G-2	A	Active	2	8	GA	MO
2-FCV-70-47	RBCCW RTN CNTMT ISOL	2-47E822-1 / G-4	A	Active	2	8	GA	MO
3-FCV-70-47	RBCCW RTN CNTMT ISOL	3-47E822-1 / G-4	A	Active	2	8	GA	MO

Required Test Frequency: Full stroke exercise with stroke time closed (STC) on a Quarterly (Q) frequency

Deferred Test Frequency: Full stroke exercise with stroke time closed (STC) on a Refueling Outage (RO) frequency

Justification for Deferred Test Frequency: It is impractical to exercise and stroke time the Reactor Building Closed Cooling Water (RBCCW) system valve (FCV-70-47) to the closed position during power operation because it will isolate cooling water to the reactor recirculation pump seal and bearings possibly causing damage.

This test should only be performed when both reactor recirculation pumps are stopped. It has been determined that it is not necessary to schedule valve testing that requires stopping and restarting the reactor recirculation pumps during cold shutdown solely to allow for the testing of these valves. This repetitive cycling would increase pump wear and stress, as well as the number of cycles of related plant equipment, and could extend the length of cold shutdown outages. (Reference: NUREG-1482, Section 3.1.1.4)

It is also impractical to partial exercise these valves for the same reasons stated above.

Therefore, these valves will be full stroke exercise and stroke time tested to the close position (STC) on a refueling outage frequency.

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Deferred Test Justification: DTJ-7

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-FCV-74-47	RHR SD CLG OUTBD ISOL	1-47E811-1 / E-5	A	Active	1	20	GA	MO
1-FCV-74-48	RHR SD CLG INBD ISOL	1-47E811-1 / E-5	A	Active	1	20	GA	MO
1-FCV-74-53	RHR LP I INJ	1-47E811-1 / F-6	A	Active	1	24	GA	MO
1-FCV-74-67	RHR LP II INJ	1-47E811-1 / F-4	A	Active	1	24	GA	MO
1-FCV-75-25	CS LP I INJ	1-47E814-1 / F-6	A	Active	1	12	GA	MO
1-FCV-75-53	CS LP II INJ	1-47E814-1 / G-6	A	Active	1	12	GA	MO
2-FCV-74-47	RHR SD CLG OUTBD ISOL	2-47E811-1 / E-5	A	Active	1	20	GA	MO
2-FCV-74-48	RHR SD CLG INBD ISOL	2-47E811-1 / F-5	A	Active	1	20	GA	MO
2-FCV-74-53	RHR LP I INJ	2-47E811-1 / F-6	A	Active	1	24	GA	MO
2-FCV-74-67	RHR LP II INJ	2-47E811-1 / F-3	A	Active	1	24	GA	MO
2-FCV-75-25	CS LP I INJ	2-47E814-1 / F-6	A	Active	1	12	GA	MO
2-FCV-75-53	CS LP II INJ	2-47E814-1 / G-6	A	Active	1	12	GA	MO
3-FCV-74-47	RHR SD CLG OUTBD ISOL	3-47E811-1 / E-5	A	Active	1	20	GA	MO
3-FCV-74-48	RHR SD CLG INBD ISOL	3-47E811-1 / F-5	A	Active	1	20	GA	MO
3-FCV-74-53	RHR LOOP I INJ	3-47E811-1 / F-6	A	Active	1	24	GA	MO
3-FCV-74-67	RHR LOOP II INJ	3-47E811-1 / F-3	A	Active	1	24	GA	MO
3-FCV-75-25	CS LOOP I INJ	3-47E814-1 / F-6	A	Active	1	12	GA	MO
3-FCV-75-53	CS LOOP II INJ	3-47E814-1 / G-6	A	Active	1	12	GA	MO

Required Test Frequency:

Emergency Core Cooling System (ECCS) valves (FCV-74-53, 67 and FCV-75-25, 53)
- Full stroke exercise with stroke time open (STO) on a Quarterly (Q) frequency
- Full stroke exercise with stroke time closed (STC) on a Quarterly (Q) frequency

Shutdown Cooling System (SDC) valve (FCV-74-47 and 48)
- Full stroke exercise with stroke time open (STO) on a Quarterly (Q) frequency
- Full stroke exercise with stroke time closed (STC) on a Quarterly (Q) frequency

Deferred Test Frequency:

Emergency Core Cooling System (ECCS) valves (FCV-74-53, 67 and FCV-75-25, 53)
- Full stroke exercise with stroke time open (STO) on a Cold Shutdown (CSD) frequency
- Full stroke exercise with stroke time closed (STC) on a Cold Shutdown (CSD) frequency

Shutdown Cooling System (SDC) valve (FCV-74-47 and 48)
- Full stroke exercise with stroke time open (STO) on a Cold Shutdown (CSD) frequency
- Full stroke exercise with stroke time closed (STC) on a Cold Shutdown (CSD) frequency

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Justification for Deferred Test Frequency:

It is impractical to exercise and stroke time the Residual Heat Removal (RHR) system valves (FCV-74-47, 48, 53, and 67) and Core Spray (CS) system valves (FCV-75-25, and 53) to the open position during power operation because it requires low-pressure interlock logic to be bypassed. These valves are Pressure Isolation Valves (PIVs) which provide the pressure boundary between the high pressure reactor system and the low pressure ECCS and SDC systems. The low pressure interlock logic is specifically designed to prevent opening of the PIVs in order to protect the low pressure ECCS/SDC piping/components. Defeating the low pressure interlock and opening a PIV to perform exercise and stroke time testing would eliminate one of the two barriers to prevent an inter-system LOCA and is not practicable for protection of safety-related equipment.

It is also impractical to partial stroke exercise open these valves for the same reasons stated above.

It is impractical to exercise and stroke time these valves to the close position during power operations because the valves have to be opened in order to exercise and time them closed. The justification to defer opening of the valves is provided above.

Therefore, the ECCS valves will be full stroke exercise and stroke time open (STO) and closed (STC) and the SDC valves will be full stroke exercise and stroke time close (STC) on a cold shutdown frequency.

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Deferred Test Justification: DTJ-8

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-PCV-1-151	SJAE 1A STG 1/2 REG	1-47E801-2 / J-7	B	Active	2	1	GL	AO
1-PCV-1-153	SJAE 1B STG 1/2 REG	1-47E801-2 / H-9	B	Active	2	1	GL	AO
1-PCV-1-166	SJAE 1A STG 3 REG	1-47E801-2 / I-7	B	Active	2	1	GL	AO
1-PCV-1-167	SJAE 1A STG 3 REG	1-47E801-2 / G-9	B	Active	2	1	GL	AO
2-PCV-1-151	SJAE 2A STG 1/2 PREG	2-47E801-2 / B-4	B	Active	2	1.5	GL	AO
2-PCV-1-153	SJAE 2B STG 1/2 PREG	2-47E801-2 / B-3	B	Active	2	1.5	GL	AO
2-PCV-1-166	SJAE 2A STG 3 PREG	2-47E801-2 / B-4	B	Active	2	1.5	GL	AO
2-PCV-1-167	SJAE 2B STG 3 PREG	2-47E801-2 / B-3	B	Active	2	1.5	GL	AO
3-PCV-1-151	SJAE 3A STG 1/2 REG	3-47E801-2 / B-4	B	Active	2	1.5	GL	AO
3-PCV-1-153	SJAE 3B STG 1/2 REG	3-47E801-2 / B-3	B	Active	2	1.5	GL	AO
3-PCV-1-166	SJAE 3A STG 3 REG	3-47E801-2 / B-4	B	Active	2	1.5	GL	AO
3-PCV-1-167	SJAE 3B STG 3 REG	3-47E801-2 / B-3	B	Active	2	1.5	GL	AO

Required Test Frequency: Full stroke exercise with stroke time closed (STC) on a Quarterly (Q) frequency

Deferred Test Frequency: Full stroke exercise with stroke time closed (STC) on a Cold Shutdown (CSD) frequency

Justification for Deferred Test Frequency: It is impractical to exercise and stroke time the Main Steam (MS) to Steam Jet Air Ejectors (SJAE) valves (FCV-1-151, 153, 166, and 167) to the close position during power operation because it requires isolation of the associated SJAE. Isolation this flow path could lead to the loss of condenser vacuum and potential unit trip.

It is also impractical to partial stroke exercise close these valves for the same reasons stated above.

Therefore, these valves will be exercise and stroke time close (STC) tested on a cold shutdown frequency.

Appendix C - Deferred Test Justifications
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Deferred Test Justification: DTJ-9

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-FCV-1-168	MS LN A DRN ISOL	1-47E801-1 / C-9	B	Active	2	2	GA	MO
1-FCV-1-169	MS LN B DRN ISOL	1-47E801-1 / C-9	B	Active	2	2	GA	MO
1-FCV-1-170	MS LN C DRN ISOL	1-47E801-1 / E-9	B	Active	2	2	GA	MO
1-FCV-1-171	MS LN D DRN ISOL	1-47E801-1 / F-9	B	Active	2	2	GA	MO
2-FCV-1-168	MS LN A DRN ISOL	2-47E801-1 / F-3	B	Active	2	2	GA	MO
2-FCV-1-169	MS LN B DRN ISOL	2-47E801-1 / F-3	B	Active	2	2	GA	MO
2-FCV-1-170	MS LN C DRN ISOL	2-47E801-1 / E-3	B	Active	2	2	GA	MO
2-FCV-1-171	MS LN D DRN ISOL	2-47E801-1 / E-3	B	Active	2	2	GA	MO
3-FCV-1-168	MS LN A DRN ISOL	3-47E801-1 / C-9	B	Active	2	2	GA	MO
3-FCV-1-169	MS LN B DRN ISOL	3-47E801-1 / C-9	B	Active	2	2	GA	MO
3-FCV-1-170	MS LN C DRN ISOL	3-47E801-1 / E-9	B	Active	2	2	GA	MO
3-FCV-1-171	MS LN D DRN ISOL	3-47E801-1 / E-9	B	Active	2	2	GA	MO

Required Test Frequency: Full stroke exercise with stroke time open (STO) on a Quarterly (Q) frequency

Deferred Test Frequency: Full stroke exercise with stroke time open (STO) on a Cold Shutdown (CSD) frequency

Justification for Deferred Test Frequency: It is impractical to exercise and stroke time the Main Steam (MS) system drain valves (FCV-1-168, 169, 170, and 171) to the open position during power operation because system interlock logic requires the main turbine speed to be less than 1700 rpm and at least one Main Steam Isolation Valve (MISV) to be closed in order to close these valves as necessary to facilitate open testing. In addition, testing of these valves require two operators to enter the Turbine Building Steam Tunnel which is a locked high radiation area and a high temperature area that requires special monitoring of personnel. It is impractical to close an MSIV to facilitate testing of these valves because it isolates flow of one main steam line to the turbine which could cause a severe transient possibly resulting in a unit trip.

It is also impractical to partial stroke exercise close these valves for the same reasons stated above.

Therefore, these valves will be exercise and stroke time open (STO) tested on a cold shutdown frequency.

Appendix D - Clarification of Valve Test Methods
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Clarification of Valve Test Mehod: MSRV

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-PCV-1-179	MS LN A RLF	1-47E801-1 / B-4	B/C	Active	1	6	RV	AO/SA
1-PCV-1-18	MS LN B RLF	1-47E801-1 / C-1	B/C	Active	1	6	RV	AO/SA
1-PCV-1-180	MS LN D RLF	1-47E801-1 / E-4	B/C	Active	1	6	RV	AO/SA
1-PCV-1-19	MS LN B RLF	1-47E801-1 / C-2	B/C	Active	1	6	RV	AO/SA
1-PCV-1-22	MS LN B RLF	1-47E801-1 / C-3	B/C	Active	1	6	RV	AO/SA
1-PCV-1-23	MS LN B RLF	1-47E801-1 / C-4	B/C	Active	1	6	RV	AO/SA
1-PCV-1-30	MS LN C RLF	1-47E801-1 / E-1	B/C	Active	1	6	RV	AO/SA
1-PCV-1-31	MS LN C RLF	1-47E801-1 / E-2	B/C	Active	1	6	RV	AO/SA
1-PCV-1-34	MS LN C RLF	1-47E801-1 / E-4	B/C	Active	1	6	RV	AO/SA
1-PCV-1-4	MS LN A RLF	1-47E801-1 / B-3	B/C	Active	1	6	RV	AO/SA
1-PCV-1-41	MS LN D RLF	1-47E801-1 / F-3	B/C	Active	1	6	RV	AO/SA
1-PCV-1-42	MS LN D RLF	1-47E801-1 / F-4	B/C	Active	1	6	RV	AO/SA
1-PCV-1-5	MS LN A RLF	1-47E801-1 / B-5	B/C	Active	1	6	RV	AO/SA
2-PCV-1-179	MS LN A RLF	2-47E801-1 / G-6	B/C	Active	1	6	RV	AO/SA
2-PCV-1-18	MS LN B RLF	2-47E801-1 / F-8	B/C	Active	1	6	RV	AO/SA
2-PCV-1-180	MS LN D RLF	2-47E801-1 / E-6	B/C	Active	1	6	RV	AO/SA
2-PCV-1-19	MS LN B RLF	2-47E801-1 / F-7	B/C	Active	1	6	RV	AO/SA
2-PCV-1-22	MS LN B RLF	2-47E801-1 / G-6	B/C	Active	1	6	RV	AO/SA
2-PCV-1-23	MS LN B RLF	2-47E801-1 / G-6	B/C	Active	1	6	RV	AO/SA
2-PCV-1-30	MS LN C RLF	2-47E801-1 / F-8	B/C	Active	1	6	RV	AO/SA
2-PCV-1-31	MS LN C RLF	2-47E801-1 / F-7	B/C	Active	1	6	RV	AO/SA
2-PCV-1-34	MS LN C RLF	2-47E801-1 / E-6	B/C	Active	1	6	RV	AO/SA
2-PCV-1-4	MS LN A RLF	2-47E801-1 / H-7	B/C	Active	1	6	RV	AO/SA
2-PCV-1-41	MS LN D RLF	2-47E801-1 / E-7	B/C	Active	1	6	RV	AO/SA
2-PCV-1-42	MS LN D RLF	2-47E801-1 / E-6	B/C	Active	1	6	RV	AO/SA
2-PCV-1-5	MS LN A RLF	2-47E801-1 / H-6	B/C	Active	1	6	RV	AO/SA
3-PCV-1-179	MS LN A RLF	3-47E801-1 / B-4	B/C	Active	1	6	RV	AO/SA
3-PCV-1-18	MS LN B RLF	3-47E801-1 / C-1	B/C	Active	1	6	RV	AO/SA
3-PCV-1-180	MS LN D RLF	3-47E801-1 / F-4	B/C	Active	1	6	RV	AO/SA
3-PCV-1-19	MS LN B RLF	3-47E801-1 / C-2	B/C	Active	1	6	RV	AO/SA
3-PCV-1-22	MS LN B RLF	3-47E801-1 / C-3	B/C	Active	1	6	RV	AO/SA

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Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
3-PCV-1-23	MS LN B RLF	3-47E801-1 / C-4	B/C	Active	1	6	RV	AO/SA
3-PCV-1-30	MS LN C RLF	3-47E801-1 / E-1	B/C	Active	1	6	RV	AO/SA
3-PCV-1-31	MS LN C RLF	3-47E801-1 / E-2	B/C	Active	1	6	RV	AO/SA
3-PCV-1-34	MS LN C RLF	3-47E801-1 / E-4	B/C	Active	1	6	RV	AO/SA
3-PCV-1-4	MS LN A RLF	3-47E801-1 / B-3	B/C	Active	1	6	RV	AO/SA
3-PCV-1-41	MS LN D RLF	3-47E801-1 / F-3	B/C	Active	1	6	RV	AO/SA
3-PCV-1-42	MS LN D RLF	3-47E801-1 / F-4	B/C	Active	1	6	RV	AO/SA
3-PCV-1-5	MS LN A RLF	3-47E801-1 / B-5	B/C	Active	1	6	RV	AO/SA

Main Steam Relief Valve Testing

Purpose

This Clarification of Valve Test Methods demonstrates the BFN approach to testing Main Steam Relief Valves (MSRVs) meets OM Code requirements.

Background

These valves are Code Class 1 (equivalent), Target Rock Model 7567F pilot operated safety/relief valve. They are categorized in accordance with ISTC-1300 as Category B/C because they are capable of remote-manual operation when inlet pressure is below valve setpoint and are self actuated when inlet pressure reaches valve setpoint. However, ISTC-1200 specifically excludes these valves from the requirements of ISTC-3700, Valve Position Verification and ISTC-3500, Valve Testing Requirements normally associated with Category B valves. As a result, these valves are only subject to test requirements specified in OM Code, Mandatory Appendix I to satisfy IST Program requirements.

The BFN MSRVs design includes a main body, pilot valve, solenoid valve, and air operator assembly. ASME OM Code Inquiry (RIMS L29 120815 801) provides clarification that the pilot valve does not fit the definition of auxiliary actuating device. However, the solenoid and air operator are considered an auxiliary actuating device.

ASME OM Code Interpretation 98-8, clarifies that a pilot operated relief valve with an auxiliary actuating device is not required to be tested as a unit. Furthermore, it clarifies that set pressure determination on the pilot operator may be performed after the pilot operator is removed from the valve body. In addition, Interpretation 01-16 provides additional clarification that testing as a unit is not required.

Technical Specification Surveillance Requirement (SR) 3.4.3.1 requires setpoint testing of the MSRVs at a frequency in accordance with the IST Program. In addition, SR 3.4.3.2 requires verification that each MSRV opens when manually actuated on a 24 month frequency.

OM Code Requirements

Based on the background information provided above, the following Mandatory Appendix I requirements are applicable to the MSRVs.

I-1320 Test Frequencies, Class 1 Pressure Relief Valves.

(a) 5-Year Test Interval. Class 1 pressure relief valves shall be tested at least once every 5 years, starting with initial electric power generation. No maximum limit is specified for the number of valves to be tested within each interval; however, a minimum of 20% of the valves from each valve group shall be tested within any 24-month interval. This 20% shall consist of valves that have not been tested during the current 5-year interval, if they exist. The test interval for any individual valve shall not exceed 5 years.

(b) Replacement With Pretested Valves. The Owner may satisfy testing requirements by installing pretested valves to replace valves that have been in service, provided that:

(1) for replacement of a partial complement of valves, the valves removed from service shall be tested prior to resumption of electric power generation; or

(2) for replacement of a full complement of valves, the valves removed from service shall be tested within 12 months of removal from the system.

OM Code Requirements (Continued)

I-3310 Class 1 Main Steam Pressure Relief Valves With Auxiliary Actuating Devices

Tests before maintenance or set-pressure adjustment, or both, shall be performed for I-3310(a), (b), and (c) in sequence. The remaining shall be performed after maintenance or set-pressure adjustment:

(a) visual examination

(b) seat tightness determination,[2] if practicable

(c) set-pressure determination

(d) determination of electrical characteristics and pressure integrity of solenoid valves(s)

(e) determination of pressure integrity and stroke capability of air actuator

(f) determination of operation and electrical characteristics of position indicators

(g) determination of operation and electrical characteristics of bellows alarm switch

(h) determination of actuating pressure of auxiliary actuating device sensing element, where applicable, and electrical continuity

(i) determination of compliance with the Owner's seat tightness criteria

[2] *This test need not be performed at the same pressure as the final seat tightness test. This test may be quantitative or qualitative, dependant on the observed condition. This test is primarily for gross determination of "as found" seat tightness.*

BFN MSRV Testing Activities

BFN performs the following MSRV testing activities each refueling outage.

1. BFN Procedure MCI-0-001-VLV002
   a. The MSRVs scheduled for test are visually examined. The extent of visual examination is dependent on the amount of insulation removed - all accessible areas are examined.
   b. The pilot valves are removed from the MSRV main bodies (this activity does not affect set pressure or seat tightness)
   c. At least one main body is removed and replaced with refurbished main body
   d. Pre-tested Pilot valves are installed on the MSRV main bodies
   e. Solenoid valves are inspected, tested for electrical characteristics (e.g., "pull-in" and "drop-off" tests), and leak tested to verify pressure integrity (e.g., 0.05 scfh acceptance criteria)
   f. Air operator assemblies are inspected and leak tested to verify pressure integrity (e.g., 0.05 scfh acceptance criteria)

2. BFN Procedure 1, 2, 3-SR-3.4.3.2
   a. All MSRVs are exercised open and closed by manual actuation.
   b. Position indication and seat tightness are verified during and following the exercise test using the valve indicating lights, temperature indication, and acoustic monitoring.

3. Wyle Test Procedure 1030 (approved by BFN)
   a. Pilot valves removed from service are sent to Wyle Labs where they are tested for as-found seat tightness, as-found set pressure testing and refurbishment.
   b. Main body(s) removed from service is sent to Wyle Labs for testing and refurbishment.

4. BFN Procedures 0-SR-3.4.3.1.a and 0-SR-3.4.3.1.b
   a. If less than full complement of MSRV pilot valves are replaced during an outage, then the removed pilot valve valves are as-found tested prior to resumption of power operations.
   b. If a full complement of MSRV pilot valves are replaced during an outage, then the removed pilot valves are as-found tested within 12 months of removal.
   c. At least one-half of all MSRVs are tested each refueling outage such that all MSRVs are tested every four years. As-found and as-left test data for pilot valves removed from service and sent to Wyle Labs is reviewed, documented, and compared to acceptance criteria. Performance of these procedures documents compliance with IST Program and Technical Specification SR 3.4.3.1 and 5.5.6 requirements.

BFN Activities Equivalent to OM Code Requirement

The table below provides a list of each Code requirement and the applicable BFN MSRV testing activities (described in detail above) that satisfy the associated Code requirement.

Code Requirement	BFN MSRV Testing Activities
I-1310(a) 5 year test frequency	1.a, 1.b, 1.d, 2.a, 2.b, 3.a, and 4.c - all valves tested within two refueling outages (4 years).
I-1310(b) replacement with pretested valves	1.b, 1.d, 2,a, 4.a, and 4.b provide control of replacement with pretested valves
I-3310(a) visual examination determination	1.a
I-3310(b) seat tightness	3.a and 4.c
I-3310(c) set pressure determination	3.a and 4.c
I-3310(d) solenoid valve(s)	1.e
I-3310(e) air actuator	1.f and 2.a
I-3310(f) position indicators	2.b
I-3310(g) bellows alarm switch	not applicable to BFN MSRV design
I-3310(h) aux actuating device sensing element	not applicable to BFN MSRV design
I-3310(i) seat tightness compliance	2.b

Appendix D - Clarification of Valve Test Methods
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Clarification of Valve Testing Method: PIV

Valve ID	Function	Drawing / Coor	Cat	Act/Pass	Class	Size	Type	Act
1-CKV-74-54	RHR LP I CKV	1-47E811-1 / F-6	A/C	Active	1	24	CK	SA
1-CKV-74-661	RHR THERMAL RLF	1-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
1-CKV-74-662	RHR THERMAL RLF	1-47E811-1 / D-8	A/C	Active	1	0.75	CK	SA
1-CKV-74-68	RHR LP II CKV	1-47E811-1 / F-4	A/C	Active	1	24	CK	SA
1-CKV-75-26	CS LP I CKV	1-47E814-1 / F-7	A/C	Active	1	12	CK	SA
1-CKV-75-54	CS LP II CKV	1-47E814-1 / G-7	A/C	Active	1	12	CK	SA
1-FCV-74-47	RHR SD CLG OUTBD ISOL	1-47E811-1 / E-5	A	Active	1	20	GA	MO
1-FCV-74-48	RHR SD CLG INBD ISOL	1-47E811-1 / E-5	A	Active	1	20	GA	MO
1-FCV-74-53	RHR LP I INJ	1-47E811-1 / F-6	A	Active	1	24	GA	MO
1-FCV-74-67	RHR LP II INJ	1-47E811-1 / F-4	A	Active	1	24	GA	MO
1-FCV-75-25	CS LP I INJ	1-47E814-1 / F-6	B	Passive	1	12	GA	MO
1-FCV-75-53	CS LP II INJ	1-47E814-1 / G-6	A	Active	1	12	GA	MO
2-CKV-74-54	RHR SYSTEM I CHECK VAVLE	2-47E811-1 / F-6	A/C	Active	1	24	CK	SA
2-CKV-74-661	RHR TRCV	2-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
2-CKV-74-662	RHR TRCV	2-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
2-CKV-74-68	RHR SYSTEM II CHECK VALVE	2-47E811-1 / F-4	A/C	Active	1	24	CK	SA
2-CKV-75-26	CS LP I CK	2-47E814-1 / F-7	A/C	Active	1	12	CK	SA
2-CKV-75-54	CS LP II CK	2-47E814-1 / G-7	A/C	Active	1	12	CK	SA
2-FCV-74-47	RHR SD CLG OUTBD ISOL	2-47E811-1 / E-5	A	Active	1	20	GA	MO
2-FCV-74-48	RHR SD CLG INBD ISOL	2-47E811-1 / F-5	A	Active	1	20	GA	MO
2-FCV-74-53	RHR LP I INJ	2-47E811-1 / F-6	A	Active	1	24	GA	MO
2-FCV-74-67	RHR LP II INJ	2-47E811-1 / F-3	A	Active	1	24	GA	MO
2-FCV-75-25	CS LP I INJ	2-47E814-1 / F-6	A	Active	1	12	GA	MO
2-FCV-75-53	CS LP II INJ	2-47E814-1 / G-6	A	Active	1	12	GA	MO
3-CKV-74-54	RHR LOOP I CKV	3-47E811-1 / F-6	A/C	Active	1	24	CK	SA
3-CKV-74-661	RHR THERMAL RLF CK	3-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
3-CKV-74-662	RHR THERMAL RLF CK	3-47E811-1 / F-5	A/C	Active	1	0.75	CK	SA
3-CKV-74-68	RHR LOOP II CKV	3-47E811-1 / F-4	A/C	Active	1	24	CK	SA
3-CKV-75-26	CS LOOP I TESTABLE CK	3-47E814-1 / F-7	A/C	Active	1	12	CK	SA
3-CKV-75-54	CS LOOP II TESTABLE CK	3-47E814-1 / G-7	A/C	Active	1	12	CK	SA
3-FCV-74-47	RHR SD CLG OUTBD ISOL	3-47E811-1 / E-5	A	Active	1	20	GA	MO

3-FCV-74-48	RHR SD CLG INBD ISOL	3-47E811-1 / F-5	A	Active	1	20	GA	MO
3-FCV-74-53	RHR LOOP I INJ	3-47E811-1 / F-6	A	Active	1	24	GA	MO
3-FCV-74-67	RHR LOOP II INJ	3-47E811-1 / F-3	A	Active	1	24	GA	MO
3-FCV-75-25	CS LOOP I INJ	3-47E814-1 / F-6	A	Active	1	12	GA	MO
3-FCV-75-53	CS LOOP II INJ	3-47E814-1 / G-6	A	Active	1	12	GA	MO

Pressure Isolation Valve Test Method and Acceptance Criteria

Purpose

This Clarification of Valve Test Methods provides the basis for the Owner specified test method and acceptance criteria used for testing of pressure isolation valves.

Background

NRC Generic Letter 87-06, Periodic Verification of Leak Tight Integrity of Pressure Isolation Valves, requested licensees to submit information regarding their approach to assuring the leak-tight integrity of all pressure isolation valves. BFN submitted the requested information to the NRC on June 19, 1987 (reference RIMS L448706190805) and the NRC accepted TVA's response to Generic Letter 87-06 on July, 6, 1988 (reference RIMS R08880706001).

TVA's response to Generic Letter 87-06 identified the following valves as Pressure Isolation Valves (PIVs), test method, test frequency, and acceptance criteria.

PIVs	74-47, 74-48, 74-53, 74-54, 74-67, 74-68, 74-661 and 74-662 (tested as a single barrier), 75-25, 75-26, 75-53, and 75-54
Test Method	Each valve is periodically leak-tested with water at a reduced pressure of 56 psig and adjusted to "functional maximum differential" in accordance with ASME Section XI IWV-3423(e). Other measures to ensure valve integrity consist of monitoring the respective loop pressure on a daily basis.
Test Frequency	Each valve is tested once per refueling outage, not to exceed two years between tests.
Acceptance Criteria	Each valve's acceptance criteria is 50 percent of the lower pressure system's relief valve capacity.

Current Position for Testing PIVs

Leak testing of PIVs will continue as stated in TVA's response to Generic Letter 87-06 except the test pressure is no longer required to be exactly 56 psig. This approach to leak testing PIVs complies with the OM Code, ISTC-3630.

Test Pressure and Adjustment of Measured Leak Rate

If the test pressure is less than function maximum pressure differential of the PIV then the observed leak rate will be adjusted to the function maximum pressure differential. This adjustment will be calculated as the ratio between the test pressure and function pressure differential assuming the leakage to be directly proportional to the pressure differential to the one-half power. This adjustment is expressed as the following formula:

$$L_A = L_M(P_D/P_T)^{1/2}$$

Where:
L_A = Leak Rate Adjusted to maximum function pressure differential
L_M = Leak Rate Measured
P_T = Test Pressure
P_D = Maximum Function Pressure Differential

Note: The Maximum Function Pressure Differential to be used is 1050 psig based on Tech Spec 3.4.10 maximum allowed reactor steam dome pressure (elevation related head pressure and low pressure system keep fill pressure essentially cancel each other out)

Leak Rate Test Method

The valve leak rate may be determined by measurement of the make-up flow rate (volume over time or direct reading) into the high pressure side of the valve under test OR by measurement of leakage volume collected over time at the low pressure side of the valve under test.

Leak Rate Acceptance Criteria

The leak rate acceptance criteria is 50 percent of the lower pressure system's relief valve capacity. The relief valve capacity stated at 70°F is not adjusted for differences in fluid density at the PIV's design temperature (562°F) because the lower temperature results in a more conservative allowable leak rate.

The leak rate acceptance criteria may be expressed in gallons per minute (gpm) or cubic feet per hour (cfh). The formula for conversion from gpm to cfh is provided below.

Leak rate in cfh = Leak rate in gpm * (1 ft^3 / 7.481 gal) * (60min / 1 hr)

The table below provides the acceptance criteria to be used in the PIV leak rate test procedures. This acceptance criteria applies to the PIV leak rate after adjustment to Maximum Function Pressure Differential (1050 psig)

PIV	Associated Low Pressure System Relief Valve	Relief Valve Capacity at 10% above setpoint (nameplate)	PIV Leak Rate Acceptance Criteria in gpm	PIV Leak Rate Acceptance Criteria in cfh
1-FCV-74-47, -48, 1-CKV-74-661, -662	1-RFV-74-659	27 gpm at 70°F	13.5 gpm	108.27 cfh
2/3-FCV-74-47, -48, 2/3-CKV-74-661, -662	2/3-RFV-74-659	70 gpm at 70°F	35 gpm	280.71 cfh
1-FCV-74-53 1-CKV-74-54	1-RFV-74-587A	47 gpm at 70°F	23.5 gpm	188.47 cfh
2/3-FCV-74-53 2/3-CKV-74-54	2/3-RFV-74-587A	122 gpm at 70°F	61 gpm	489.23 cfh
1-FCV-74-67 1-CKV-74-68	1-RFV-74-587B	47 gpm at 70°F	23.5 gpm	188.47 cfh
2/3-FCV-74-67 2/3-CKV-74-68	2/3-RFV-74-587B	122 gpm at 70°F	61 gpm	489.23 cfh
1/2/3-FCV-75-25 1/2/3-CKV-75-26	1/2/3-RFV-75-543A	129 gpm at 70°F	64.5 gpm	517.31 cfh
1/2/3-FCV-75-53 1/2/3-CKV-75-54	1/2/3-RFV-75-543B	129 gpm at 70°F	64.5 gpm	517.31 cfh

Appendix E - Code Class 1, 2, and 3 Pumps Exempt from IST Program

Flow Diagram: 1-47E817-1

PUMP ID	EXEMPTION BASIS	PUMP ID	EXEMPTION BASIS
1-PMP-68-60A	ISTA-1100	1-PMP-68-60B	ISTA-1100

Flow Diagram: 2-47E817-1

PUMP ID	EXEMPTION BASIS	PUMP ID	EXEMPTION BASIS
2-PMP-68-60A	ISTA-1100	2-PMP-68-60B	ISTA-1100

Flow Diagram: 3-47E817-1

PUMP ID	EXEMPTION BASIS	PUMP ID	EXEMPTION BASIS
3-PMP-68-60A	ISTA-1100	3-PMP-68-60B	ISTA-1100

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 0-47E815-1

VALVE ID	EXEMPTION BASIS
1-CKV-12-821	ISTA-1100

Flow Diagram: 0-47E839-5

VALVE ID	EXEMPTION BASIS
0-CKV-50-1017	ISTA-1100
0-CKV-50-1018	ISTA-1100
0-CKV-50-1019	ISTA-1100
0-CKV-50-1020	ISTA-1100
0-CKV-50-1021	ISTA-1100
0-CKV-50-1022	ISTA-1100
0-CKV-50-1023	ISTA-1100
0-CKV-50-1024	ISTA-1100

VALVE ID	EXEMPTION BASIS
0-CKV-50-521	ISTA-1100
0-CKV-50-522	ISTA-1100
0-CKV-50-555	ISTA-1100
0-CKV-50-556	ISTA-1100
0-CKV-50-563	ISTA-1100
0-CKV-50-565	ISTA-1100
0-CKV-50-580	ISTA-1100
0-CKV-50-581	ISTA-1100

VALVE ID	EXEMPTION BASIS
0-CKV-50-614	ISTA-1100
0-CKV-50-615	ISTA-1100
0-CKV-50-646	ISTA-1100
0-CKV-50-647	ISTA-1100
0-CKV-50-684	ISTA-1100
0-CKV-50-685	ISTA-1100
0-CKV-50-690	ISTA-1100
0-CKV-50-691	ISTA-1100

Flow Diagram: 1-47E610-43-1

VALVE ID	EXEMPTION BASIS
1-SHV-43-607	ISTA-1100
1-SHV-43-608	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-SHV-43-609	ISTA-1100
1-SHV-43-610	ISTA-1100
1-SHV-43-626	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-SHV-43-627	ISTA-1100
1-SHV-43-628	ISTA-1100
1-SHV-43-629	ISTA-1100

Flow Diagram: 1-47E801-1

VALVE ID	EXEMPTION BASIS
1-RTV-1-249A	ISTC-1200(a)
1-RTV-1-250A	ISTC-1200(a)
1-RTV-1-251A	ISTC-1200(a)
1-RTV-1-252A	ISTC-1200(a)
1-RTV-1-253A	ISTC-1200(a)
1-RTV-1-254A	ISTC-1200(a)
1-RTV-1-255A	ISTC-1200(a)
1-RTV-1-256A	ISTC-1200(a)
1-BOV-1-525	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-RTV-1-215A	ISTC-1200(a)
1-RTV-1-506	ISTC-1200(a)
1-SMV-1-507	ISTA-1100
1-SMV-1-515	ISTA-1100
1-DRV-1-521	ISTC-1200(a)
1-DRV-1-527	ISTC-1200(a)
1-SMV-1-534	ISTA-1100
1-SMV-1-542	ISTA-1100
1-SHV-1-9222	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-1-505	ISTC-1200(a)
1-SHV-1-513	ISTC-1200(a)
1-SHV-1-518	ISTC-1200(a)
1-SHV-1-532	ISTC-1200(a)
1-SHV-1-540	ISTC-1200(a)
1-SHV-1-735	ISTC-1200(a)
1-SHV-1-736	ISTC-1200(a)
1-VTV-1-738	ISTC-1200(a)
1-VTV-1-739	ISTC-1200(a)
1-TV-1-9223	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 1-47E801-2

VALVE ID	EXEMPTION BASIS
1-FCV-6-113	ISTA-1100
1-FCV-6-114	ISTA-1100
1-FCV-1-125	ISTA-1100
1-FCV-1-133	ISTA-1100
1-FCV-1-141	ISTA-1100
1-FCV-1-155	ISTA-1100
1-FCV-1-156	ISTA-1100
1-FCV-1-172	ISTA-1100
1-FCV-1-173	ISTA-1100
1-FCV-1-176A	ISTA-1100
1-FCV-1-176B	ISTA-1100
1-CKV-1-606	ISTA-1100
1-CKV-1-609	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-FCV-1-178A	ISTA-1100
1-FCV-1-178B	ISTA-1100
1-RTV-6-292A	ISTC-1200(a)
1-DRV-1-590	ISTC-1200(a)
1-DRV-1-595	ISTC-1200(a)
1-SHV-1-604	ISTA-1100
1-SHV-1-605	ISTA-1100
1-SHV-1-607	ISTA-1100
1-SHV-1-608	ISTA-1100
1-DRV-1-710	ISTA-1100
1-DRV-1-711	ISTA-1100
1-SHV-1-741	ISTA-1100
1-SHV-1-743	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-RTV-1-217A	ISTC-1200(a)
1-RTV-1-218A	ISTC-1200(a)
1-RTV-1-219A	ISTC-1200(a)
1-RTV-1-220A	ISTC-1200(a)
1-RTV-1-221A	ISTC-1200(a)
1-RTV-1-239A	ISTC-1200(a)
1-RTV-1-241A	ISTC-1200(a)
1-RTV-1-243A	ISTC-1200(a)
1-RTV-6-289A	ISTC-1200(a)
1-RTV-6-290A	ISTC-1200(a)
1-RTV-6-291A	ISTC-1200(a)
1-TV-1-508	ISTC-1200(a)
1-DRV-1-600	ISTC-1200(a)

Flow Diagram: 1-47E803-1

VALVE ID	EXEMPTION BASIS
1-SHV-3-66	ISTC-1200(c)
1-SHV-3-67	ISTC-1200(c)
1-DRV-3-555	ISTC-1200(a)
1-VTV-3-562	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-DRV-3-560	ISTC-1200(a)
1-DRV-3-569	ISTC-1200(a)
1-DRV-3-574	ISTC-1200(a)
1-TV-3-626	ISTC-1200(a)
1-TV-3-628	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-3-559	ISTC-1200(a)
1-SHV-3-561	ISTC-1200(a)
1-SHV-3-573	ISTC-1200(a)
1-SHV-3-575	ISTC-1200(a)
1-VTV-3-576	ISTC-1200(a)

Flow Diagram: 1-47E803-5

VALVE ID	EXEMPTION BASIS
1-RTV-3-226A	ISTC-1200(c)
1-RTV-3-227A	ISTC-1200(c)
1-RTV-3-228A	ISTC-1200(c)
1-RTV-3-229A	ISTC-1200(c)
1-RTV-3-231A	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-RTV-3-233A	ISTC-1200(c)
1-RTV-3-234A	ISTC-1200(c)
1-RTV-3-235A	ISTC-1200(c)
1-RTV-3-236A	ISTC-1200(c)
1-RTV-3-237A	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-RTV-3-240A	ISTC-1200(c)
1-SHV-3-850	ISTC-1200(c)
1-SHV-3-852	ISTC-1200(c)
1-SHV-3-854	ISTC-1200(c)
1-SHV-3-856	ISTC-1200(c)

Flow Diagram: 1-47E805-3

VALVE ID	EXEMPTION BASIS
1-SHV-6-823	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-SHV-6-827	ISTA-1100

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 1-47E807-1

VALVE ID	EXEMPTION BASIS
1-RTV-1-216A	ISTC-1200(a)

Flow Diagram: 1-47E807-2

VALVE ID	EXEMPTION BASIS
1-DRV-8-514	ISTA-1100
1-DRV-8-515	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-DRV-8-533	ISTA-1100
1-DRV-8-534	ISTA-1100
1-DRV-8-554	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-FCV-1-146	ISTA-1100
1-DRV-8-553	ISTA-1100
1-SHV-8-575	ISTA-1100

Flow Diagram: 1-47E810-1

VALVE ID	EXEMPTION BASIS
1-SHV-69-500	ISTA-1100
1-TV-69-503	ISTC-1200(a)
1-TV-69-504	ISTC-1200(a)
1-SHV-69-551	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-69-552	ISTC-1200(a)
1-TV-69-583	ISTC-1200(a)
1-TV-69-584	ISTC-1200(a)
1-TV-69-633	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-TV-69-634	ISTC-1200(a)
1-VTV-85-810A	ISTC-1200(a)
1-VTV-85-810B	ISTC-1200(a)
1-VTV-85-810C	ISTC-1200(a)
1-VTV-85-810D	ISTC-1200(a)

Flow Diagram: 1-47E811-1

VALVE ID	EXEMPTION BASIS
1-SHV-74-10	ISTC-1200(c)
1-SHV-74-22	ISTC-1200(c)
1-SHV-74-33	ISTC-1200(c)
1-SHV-74-44	ISTC-1200(c)
1-SHV-74-49	ISTC-1200(c)
1-SHV-74-55	ISTC-1200(c)
1-SHV-74-69	ISTC-1200(c)
1-SHV-74-86	ISTC-1200(c)
1-SHV-74-87	ISTC-1200(c)
1-SHV-74-89	ISTC-1200(c)
1-SHV-74-90	ISTC-1200(c)
1-RTV-43-158A	ISTA-1100
1-RTV-74-200A	ISTC-1200(a)
1-RTV-74-204A	ISTC-1200(a)
1-RTV-74-208A	ISTC-1200(a)
1-RTV-74-212A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-RTV-74-201A	ISTC-1200(a)
1-RTV-74-202A	ISTC-1200(a)
1-RTV-74-203A	ISTC-1200(a)
1-RTV-74-205A	ISTC-1200(a)
1-RTV-74-206A	ISTC-1200(a)
1-RTV-74-207A	ISTC-1200(a)
1-RTV-74-209A	ISTC-1200(a)
1-RTV-74-210A	ISTC-1200(a)
1-RTV-74-211A	ISTC-1200(a)
1-RTV-74-213A	ISTC-1200(a)
1-RTV-74-214A	ISTC-1200(a)
1-RTV-74-215A	ISTC-1200(a)
1-RTV-74-217A	ISTC-1200(a)
1-RTV-74-219A	ISTC-1200(a)
1-RTV-74-225A	ISTC-1200(a)
1-SHV-74-251A	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-SHV-74-504B	ISTC-1200(a)
1-SHV-74-504C	ISTC-1200(a)
1-SHV-74-504D	ISTC-1200(a)
1-SHV-74-506A	ISTC-1200(a)
1-SHV-74-506B	ISTC-1200(a)
1-SHV-74-506C	ISTC-1200(a)
1-SHV-74-506D	ISTC-1200(a)
1-SHV-74-514A	ISTC-1200(a)
1-SHV-74-514B	ISTC-1200(a)
1-SHV-74-514C	ISTC-1200(a)
1-SHV-74-514D	ISTC-1200(a)
1-SHV-74-546A	ISTC-1200(a)
1-SHV-74-546B	ISTC-1200(a)
1-SHV-74-546C	ISTC-1200(a)
1-SHV-74-546D	ISTC-1200(a)
1-SHV-74-548A	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
1-RTV-74-216A	ISTC-1200(a)
1-RTV-74-218A	ISTC-1200(a)
1-RTV-74-220A	ISTC-1200(a)
1-LOV-74-511A	ISTC-1200(a)
1-SHV-74-512B	ISTC-1200(a)
1-DRV-74-525A	ISTC-1200(a)
1-DRV-74-525B	ISTC-1200(a)
1-DRV-74-525C	ISTC-1200(a)
1-DRV-74-525D	ISTC-1200(a)
1-SHV-74-532A	ISTC-1200(a)
1-SHV-74-532B	ISTC-1200(a)
1-SHV-74-532C	ISTC-1200(a)
1-SHV-74-532D	ISTC-1200(a)
1-DRV-74-570A	ISTC-1200(a)
1-DRV-74-570B	ISTC-1200(a)
1-DRV-74-570C	ISTC-1200(a)
1-DRV-74-570D	ISTC-1200(a)
1-DRV-74-573A	ISTC-1200(a)
1-DRV-74-573B	ISTC-1200(a)
1-DRV-74-575A	ISTC-1200(a)
1-DRV-74-575B	ISTC-1200(a)
1-DRV-74-575C	ISTC-1200(a)
1-DRV-74-575D	ISTC-1200(a)
1-DRV-74-622	ISTC-1200(a)
1-TV-74-637A	ISTC-1200(a)
1-TV-74-637B	ISTC-1200(a)
1-SHV-74-660	ISTC-1200(c)
1-CKV-74-669	ISTA-1100
1-CKV-74-674	ISTA-1100
1-CKV-74-680A	ISTA-1100
1-CKV-74-680B	ISTA-1100
1-CKV-74-698	ISTA-1100
1-CKV-74-728	ISTA-1100
1-SHV-74-729	ISTC-1200(a)
1-SHV-74-743A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-74-251B	ISTC-1200(c)
1-SHV-74-251C	ISTC-1200(c)
1-SHV-74-251D	ISTC-1200(c)
1-SHV-74-252A	ISTC-1200(c)
1-SHV-74-252B	ISTC-1200(c)
1-SHV-74-252C	ISTC-1200(c)
1-SHV-74-252D	ISTC-1200(c)
1-TV-74-253A	ISTC-1200(a)
1-TV-74-253B	ISTC-1200(a)
1-TV-74-253C	ISTC-1200(a)
1-TV-74-253D	ISTC-1200(a)
1-TV-74-254A	ISTC-1200(a)
1-TV-74-254B	ISTC-1200(a)
1-TV-74-254C	ISTC-1200(a)
1-TV-74-254D	ISTC-1200(a)
1-SHV-74-504A	ISTC-1200(a)
1-SHV-74-512A	ISTC-1200(a)
1-SHV-74-512C	ISTC-1200(a)
1-SHV-74-512D	ISTC-1200(a)
1-SHV-74-579A	ISTC-1200(a)
1-SHV-74-579B	ISTC-1200(a)
1-SHV-74-579C	ISTC-1200(a)
1-SHV-74-579D	ISTC-1200(a)
1-SHV-74-636A	ISTC-1200(a)
1-SHV-74-636B	ISTC-1200(a)
1-SHV-74-638A	ISTC-1200(a)
1-SHV-74-638B	ISTC-1200(a)
1-TV-74-639A	ISTC-1200(a)
1-TV-74-639B	ISTC-1200(a)
1-SHV-74-663	ISTC-1200(a)
1-TV-74-664	ISTC-1200(a)
1-SHV-74-672	ISTC-1200(a)
1-SHV-74-683A	ISTC-1200(a)
1-SHV-74-683B	ISTC-1200(a)
1-SHV-74-750	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-74-548B	ISTC-1200(a)
1-SHV-74-548C	ISTC-1200(a)
1-SHV-74-548D	ISTC-1200(a)
1-SHV-74-552A	ISTC-1200(a)
1-SHV-74-552B	ISTC-1200(a)
1-SHV-74-552C	ISTC-1200(a)
1-SHV-74-552D	ISTC-1200(a)
1-SHV-74-566A	ISTC-1200(a)
1-SHV-74-566B	ISTC-1200(a)
1-SHV-74-566C	ISTC-1200(a)
1-SHV-74-566D	ISTC-1200(a)
1-SHV-74-568A	ISTC-1200(a)
1-SHV-74-568B	ISTC-1200(a)
1-SHV-74-568C	ISTC-1200(a)
1-SHV-74-568D	ISTC-1200(a)
1-SHV-74-581A	ISTC-1200(a)
1-SHV-74-581B	ISTC-1200(a)
1-SHV-74-581C	ISTC-1200(a)
1-SHV-74-581D	ISTC-1200(a)
1-SHV-74-584A	ISTC-1200(a)
1-SHV-74-584B	ISTC-1200(a)
1-SHV-74-584C	ISTC-1200(a)
1-SHV-74-584D	ISTC-1200(a)
1-SHV-74-588A	ISTC-1200(a)
1-SHV-74-588B	ISTC-1200(a)
1-SHV-74-590A	ISTC-1200(a)
1-SHV-74-590B	ISTC-1200(a)
1-SHV-74-593A	ISTC-1200(a)
1-SHV-74-593B	ISTC-1200(a)
1-SHV-74-595A	ISTC-1200(a)
1-SHV-74-595B	ISTC-1200(a)
1-SHV-74-597A	ISTC-1200(a)
1-SHV-74-597B	ISTC-1200(a)
1-SHV-74-604	ISTC-1200(a)
1-SHV-74-626A	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
1-SHV-74-743B	ISTC-1200(a)
1-SHV-74-746	ISTC-1200(a)
1-SHV-74-747	ISTC-1200(a)
1-SHV-74-748A	ISTC-1200(a)
1-SHV-74-748B	ISTC-1200(a)
1-SHV-74-749A	ISTC-1200(a)
1-SHV-74-749B	ISTC-1200(a)
1-SHV-74-749C	ISTC-1200(a)
1-SHV-74-749D	ISTC-1200(a)
1-SHV-74-754	ISTC-1200(c)
1-TV-74-756	ISTC-1200(a)
1-SHV-74-765A	ISTC-1200(a)
1-SHV-74-765B	ISTC-1200(a)
1-SMV-74-781	ISTC-1200(a)
1-SMV-74-783	ISTC-1200(a)
1-SMV-74-785	ISTC-1200(a)
1-SHV-74-801	ISTA-1100
1-TV-74-810	ISTC-1200(a)
1-TV-74-811	ISTC-1200(a)
1-TV-74-812	ISTC-1200(a)
1-SHV-74-831	ISTC-1200(c)
1-SHV-74-832	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-SHV-74-755	ISTC-1200(a)
1-SMV-74-779	ISTC-1200(a)
1-SMV-74-782	ISTC-1200(a)
1-SMV-74-784	ISTC-1200(a)
1-SHV-74-793	ISTA-1100
1-SHV-74-794A	ISTC-1200(a)
1-TV-74-795A	ISTC-1200(a)
1-SHV-74-805	ISTC-1200(a)
1-TV-74-809	ISTC-1200(a)
1-SHV-74-834	ISTC-1200(a)
1-SHV-74-836	ISTC-1200(a)
1-SHV-74-838	ISTC-1200(a)
1-SHV-74-840	ISTC-1200(a)
1-SHV-74-842	ISTC-1200(a)
1-SHV-74-844	ISTC-1200(a)
1-SHV-74-848	ISTC-1200(a)
1-SHV-74-849	ISTC-1200(a)
1-SHV-74-850	ISTC-1200(a)
1-SHV-74-851	ISTC-1200(a)
1-SHV-74-852	ISTC-1200(a)
1-SHV-74-854A	ISTC-1200(a)
1-DRV-74-970	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-74-626B	ISTC-1200(a)
1-SHV-74-629A	ISTC-1200(a)
1-SHV-74-629B	ISTC-1200(a)
1-SHV-74-633A	ISTC-1200(a)
1-SHV-74-633B	ISTC-1200(a)
1-SHV-74-654	ISTC-1200(a)
1-SHV-74-656	ISTC-1200(a)
1-SHV-74-665	ISTC-1200(a)
1-SHV-74-678	ISTC-1200(a)
1-SHV-74-707	ISTC-1200(a)
1-SHV-74-711A	ISTC-1200(a)
1-SHV-74-717B	ISTC-1200(a)
1-SHV-74-724	ISTC-1200(a)
1-SHV-74-726	ISTC-1200(a)
1-SHV-74-731	ISTC-1200(a)
1-SHV-74-732	ISTC-1200(a)
1-SHV-74-761A	ISTC-1200(a)
1-SHV-74-761B	ISTC-1200(a)
1-SHV-74-780	ISTC-1200(a)
1-SHV-74-796A	ISTC-1200(a)
1-SHV-74-796B	ISTC-1200(a)
1-SHV-74-798A	ISTC-1200(a)
1-SHV-74-798B	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 1-47E812-1

VALVE ID	EXEMPTION BASIS
1-LCV-73-8	ISTA-1100
1-FCV-73-18	ISTC-1200skid
1-FCV-73-19	ISTC-1200skid
1-PCV-73-43	ISTC-1200(b)
1-RTV-73-204A	ISTC-1200(a)
1-RTV-73-221A	ISTC-1200(a)
1-RTV-73-224A	ISTC-1200(a)
1-RTV-73-225A	ISTC-1200(a)
1-DRV-73-518	ISTC-1200(a)
1-TV-73-529	ISTC-1200(a)
1-SHV-73-534	ISTC-1200(c)
1-SHV-73-551	ISTC-1200(a)
1-SHV-73-552	ISTC-1200(a)
1-CKV-73-586	ISTA-1100
1-SHV-73-592	ISTC-1200(c)
1-SHV-73-593	ISTC-1200(c)
1-CKV-73-596	ISTA-1100
1-CKV-73-600	ISTC-1200skid
1-SHV-73-608	ISTC-1200(c)
1-CKV-73-629	ISTA-1100
1-SHV-73-652	ISTC-1200(c)
1-SHV-73-735	ISTC-1200(c)
1-SHV-73-736	ISTC-1200(c)
1-SHV-73-742	ISTC-1200(c)
1-BYV-73-745	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-RTV-73-200A	ISTC-1200(a)
1-RTV-73-203A	ISTC-1200(a)
1-RTV-73-206A	ISTC-1200(a)
1-RTV-73-207A	ISTC-1200(a)
1-RTV-73-208A	ISTC-1200(a)
1-RTV-73-210A	ISTC-1200(a)
1-RTV-73-211A	ISTC-1200(a)
1-RTV-73-212A	ISTC-1200(a)
1-VTV-73-503	ISTC-1200(a)
1-DRV-73-511	ISTC-1200(a)
1-DRV-73-521	ISTC-1200(a)
1-VTV-73-523	ISTC-1200(a)
1-VTV-73-525	ISTC-1200(a)
1-DRV-73-527	ISTC-1200(a)
1-DRV-73-530	ISTC-1200(a)
1-VTV-73-542	ISTC-1200(a)
1-VTV-73-547	ISTC-1200(a)
1-TV-73-549	ISTC-1200(a)
1-TV-73-560	ISTC-1200(a)
1-TV-73-563	ISTC-1200(a)
1-DRV-73-570	ISTC-1200(a)
1-DRV-73-578	ISTC-1200(a)
1-TV-73-584	ISTC-1200(a)
1-DRV-73-605	ISTC-1200(a)
1-TV-73-628	ISTC-1200(a)
1-DRV-73-631	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-RTV-73-201A	ISTC-1200(a)
1-RTV-73-202A	ISTC-1200(a)
1-RTV-73-209A	ISTC-1200(a)
1-RTV-73-213A	ISTC-1200(a)
1-SHV-73-232	ISTC-1200(a)
1-DRV-73-501	ISTC-1200(a)
1-DRV-73-507	ISTC-1200(a)
1-VTV-73-513	ISTC-1200(a)
1-TV-73-515	ISTC-1200(a)
1-VTV-73-532	ISTC-1200(a)
1-DRV-73-535	ISTC-1200(a)
1-DRV-73-537	ISTC-1200(a)
1-DRV-73-540	ISTC-1200(a)
1-DRV-73-545	ISTC-1200(a)
1-TV-73-572	ISTC-1200(a)
1-TV-73-575	ISTC-1200(a)
1-VTV-73-576	ISTC-1200(a)
1-VTV-73-589	ISTC-1200(a)
1-TV-73-610	ISTC-1200(a)
1-VTV-73-616	ISTC-1200(a)
1-VTV-73-630	ISTC-1200(a)
1-TV-73-637	ISTC-1200(a)
1-TV-73-639	ISTC-1200(a)
1-SHV-73-653	ISTC-1200(a)
1-SHV-73-740	ISTC-1200(a)
1-SHV-73-743	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 1-47E813-1

VALVE ID	EXEMPTION BASIS
1-LCV-71-5	ISTA-1100
1-FCV-71-9	ISTC-1200skid
1-FCV-71-10	ISTC-1200skid
1-PCV-71-22	ISTC-1200(b)
1-RTV-71-216A	ISTC-1200(a)
1-RTV-71-217A	ISTC-1200(a)
1-RTV-71-221A	ISTC-1200(a)
1-RTV-71-222A	ISTC-1200(a)
1-SHV-71-520	ISTC-1200(c)
1-VTV-71-529	ISTC-1200(a)
1-VTV-71-530	ISTC-1200(a)
1-SHV-71-538	ISTC-1200(a)
1-CKV-71-564	ISTA-1100
1-SHV-71-570	ISTC-1200(c)
1-SHV-71-571	ISTC-1200(c)
1-CKV-71-574	ISTA-1100
1-SHV-71-578	ISTC-1200(c)
1-SHV-71-579	ISTC-1200(c)
1-SHV-71-601	ISTC-1200(c)
1-SHV-71-612	ISTC-1200(c)
1-SHV-71-617	ISTC-1200(c)
1-SHV-71-618	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-RTV-71-5H	ISTC-1200(a)
1-RTV-71-5L	ISTC-1200(a)
1-RTV-71-13A	ISTC-1200(a)
1-RTV-71-13B	ISTC-1200(a)
1-TV-71-19	ISTC-1200(a)
1-SHV-71-19A	ISTC-1200(a)
1-SHV-71-19B	ISTC-1200(a)
1-SHV-71-19C	ISTC-1200(a)
1-SHV-71-19D	ISTC-1200(a)
1-SHV-71-40A	ISTC-1200(a)
1-SHV-71-40B	ISTC-1200(a)
1-SHV-71-506	ISTC-1200(a)
1-TV-71-540	ISTC-1200(a)
1-TV-71-541	ISTC-1200(a)
1-TV-71-546	ISTC-1200(a)
1-SHV-71-551	ISTC-1200(a)
1-SHV-71-553	ISTC-1200(a)
1-SHV-71-581	ISTC-1200(a)
1-SHV-71-593	ISTC-1200(a)
1-SHV-71-602	ISTC-1200(a)
1-SHV-71-604	ISTC-1200(a)
1-SHV-71-606	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-71-1BH	ISTC-1200(a)
1-SHV-71-1BL	ISTC-1200(a)
1-RTV-71-4A	ISTC-1200(a)
1-RTV-71-12A	ISTC-1200(a)
1-RTV-71-20A	ISTC-1200(a)
1-RTV-71-21A	ISTC-1200(a)
1-RTV-71-35A	ISTC-1200(a)
1-RTV-71-36H	ISTC-1200(a)
1-RTV-71-36L	ISTC-1200(a)
1-SHV-71-521	ISTC-1200(a)
1-SHV-71-524	ISTC-1200(a)
1-SHV-71-527	ISTC-1200(a)
1-SHV-71-544	ISTC-1200(a)
1-SHV-71-548	ISTC-1200(a)
1-SHV-71-561	ISTC-1200(a)
1-SHV-71-565A	ISTC-1200(a)
1-SHV-71-613	ISTC-1200(a)
1-SHV-71-615	ISTC-1200(a)
1-TV-71-616	ISTC-1200(a)
1-SHV-71-619	ISTC-1200(a)
1-SHV-71-680	ISTC-1200(a)
1-TV-71-681	ISTC-1200(a)

Flow Diagram: 1-47E814-1

VALVE ID	EXEMPTION BASIS
1-FCV-75-2	ISTC-1200(c)
1-SHV-75-5B	ISTC-1200(a)
1-SHV-75-8	ISTC-1200(c)
1-SHV-75-10	ISTC-1200(c)
1-FCV-75-11	ISTC-1200(c)
1-SHV-75-17	ISTC-1200(c)
1-SHV-75-18	ISTC-1200(c)
1-SHV-75-27	ISTC-1200(c)
1-RTV-75-28A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-75-2A	ISTC-1200(a)
1-SHV-75-2B	ISTC-1200(a)
1-SHV-75-5A	ISTC-1200(a)
1-SHV-75-5C	ISTC-1200(a)
1-RTV-75-21H	ISTC-1200(a)
1-RTV-75-21L	ISTC-1200(a)
1-SHV-75-23A	ISTC-1200(a)
1-SHV-75-23B	ISTC-1200(a)
1-SHV-75-25A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-RTV-75-4A	ISTC-1200(a)
1-RTV-75-7A	ISTC-1200(a)
1-SHV-75-11A	ISTC-1200(a)
1-SHV-75-11B	ISTC-1200(a)
1-RTV-75-13A	ISTC-1200(a)
1-SHV-75-14A	ISTC-1200(a)
1-SHV-75-14B	ISTC-1200(a)
1-SHV-75-14C	ISTC-1200(a)
1-RTV-75-16A	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
1-FCV-75-30	ISTC-1200(c)
1-SHV-75-33A	ISTC-1200(a)
1-SHV-75-33B	ISTC-1200(a)
1-SHV-75-33C	ISTC-1200(a)
1-SHV-75-36	ISTC-1200(c)
1-SHV-75-38	ISTC-1200(c)
1-FCV-75-39	ISTC-1200(c)
1-SHV-75-45	ISTC-1200(c)
1-SHV-75-46	ISTC-1200(c)
1-SHV-75-54B	ISTC-1200(a)
1-SHV-75-55	ISTC-1200(c)
1-RTV-75-56A	ISTC-1200(a)
1-SHV-75-71	ISTC-1200(a)
1-SHV-75-72	ISTC-1200(a)
1-SHV-75-512A	ISTC-1200(a)
1-SHV-75-512B	ISTC-1200(a)
1-SHV-75-512C	ISTC-1200(a)
1-SHV-75-512D	ISTC-1200(a)
1-SHV-75-574A	ISTC-1200(a)
1-SHV-75-574B	ISTC-1200(a)
1-SHV-75-574C	ISTC-1200(a)
1-SHV-75-574D	ISTC-1200(a)
1-SHV-75-649	ISTC-1200(c)
1-SHV-75-650	ISTC-1200(c)
1-BYV-75-722	ISTC-1200(c)
1-BYV-75-725	ISTC-1200(c)
1-BYV-75-728	ISTC-1200(c)
1-BYV-75-731	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-SHV-75-25B	ISTC-1200(a)
1-SHV-75-39A	ISTC-1200(a)
1-SHV-75-39B	ISTC-1200(a)
1-SHV-75-42A	ISTC-1200(a)
1-SHV-75-42B	ISTC-1200(a)
1-SHV-75-42C	ISTC-1200(a)
1-RTV-75-49H	ISTC-1200(a)
1-RTV-75-49L	ISTC-1200(a)
1-SHV-75-51A	ISTC-1200(a)
1-SHV-75-51B	ISTC-1200(a)
1-TV-75-52	ISTC-1200(a)
1-SHV-75-52	ISTC-1200(a)
1-SHV-75-53A	ISTC-1200(a)
1-SHV-75-53B	ISTC-1200(a)
1-SHV-75-54A	ISTC-1200(a)
1-SHV-75-510B	ISTC-1200(a)
1-SHV-75-518	ISTC-1200(a)
1-SHV-75-584A	ISTC-1200(a)
1-SHV-75-584B	ISTC-1200(a)
1-SHV-75-591	ISTC-1200(a)
1-SHV-75-593	ISTC-1200(a)
1-SHV-75-595	ISTC-1200(a)
1-SHV-75-597	ISTC-1200(a)
1-SHV-75-624A	ISTC-1200(a)
1-SHV-75-624B	ISTC-1200(a)
1-TV-75-625A	ISTC-1200(a)
1-TV-75-625B	ISTC-1200(a)
1-SHV-75-626	ISTC-1200(a)
1-TV-75-627	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-RTV-75-20A	ISTC-1200(a)
1-SHV-75-24	ISTC-1200(a)
1-RTV-75-24A	ISTC-1200(a)
1-TV-75-26A	ISTC-1200(a)
1-SHV-75-26A	ISTC-1200(a)
1-SHV-75-26B	ISTC-1200(a)
1-TV-75-26B	ISTC-1200(a)
1-SHV-75-30A	ISTC-1200(a)
1-SHV-75-30B	ISTC-1200(a)
1-RTV-75-32A	ISTC-1200(a)
1-RTV-75-35A	ISTC-1200(a)
1-RTV-75-41A	ISTC-1200(a)
1-RTV-75-44A	ISTC-1200(a)
1-RTV-75-48A	ISTC-1200(a)
1-TV-75-54A	ISTC-1200(a)
1-TV-75-54B	ISTC-1200(a)
1-SHV-75-83	ISTC-1200(c)
1-SHV-75-510A	ISTC-1200(a)
1-SHV-75-510C	ISTC-1200(a)
1-SHV-75-510D	ISTC-1200(a)
1-SHV-75-535	ISTC-1200(a)
1-SHV-75-637	ISTC-1200(a)
1-SHV-75-639	ISTC-1200(a)
1-SHV-75-643	ISTC-1200(a)
1-SHV-75-645	ISTC-1200(a)
1-SHV-75-720	ISTC-1200(a)
1-SHV-75-723	ISTC-1200(a)
1-SHV-75-726	ISTC-1200(a)
1-SHV-75-729	ISTC-1200(a)

Flow Diagram: 1-47E815-3

VALVE ID	EXEMPTION BASIS
1-CKV-12-624	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-CKV-12-636	ISTA-1100

Flow Diagram: 1-47E817-1

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
1-FCV-3-98	ISTC-1200(a)
1-FCV-3-99	ISTC-1200(a)
1-FCV-3-188A	ISTA-1100
1-RTV-68-200A	ISTC-1200(c)
1-RTV-68-201A	ISTC-1200(c)
1-RTV-68-202A	ISTC-1200(c)
1-RTV-68-203A	ISTC-1200(c)
1-RTV-68-204A	ISTC-1200(c)
1-RTV-68-213A	ISTC-1200(c)
1-RTV-68-214A	ISTC-1200(c)
1-RTV-68-216A	ISTC-1200(c)
1-RTV-68-217A	ISTC-1200(c)
1-RTV-68-218A	ISTC-1200(c)
1-RTV-68-219A	ISTC-1200(c)
1-RTV-68-220A	ISTC-1200(c)
1-RTV-68-221A	ISTC-1200(c)
1-RTV-68-223A	ISTC-1200(c)
1-RTV-68-224A	ISTC-1200(c)
1-RTV-68-225A	ISTC-1200(c)
1-RTV-68-226A	ISTC-1200(c)
1-RTV-68-264A	ISTC-1200(c)
1-RTV-68-265A	ISTC-1200(c)
1-RTV-68-266A	ISTC-1200(c)
1-RTV-68-267A	ISTC-1200(c)
1-RTV-68-268A	ISTC-1200(c)
1-RTV-68-269A	ISTC-1200(c)
1-RTV-68-270A	ISTC-1200(c)
1-RTV-68-271A	ISTC-1200(c)
1-RTV-68-272A	ISTC-1200(c)
1-RTV-68-273A	ISTC-1200(c)
1-RTV-68-274A	ISTC-1200(c)
1-RTV-68-275A	ISTC-1200(c)
1-RTV-68-276A	ISTC-1200(c)
1-DRV-10-505	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-FCV-68-1	ISTA-1100
1-FCV-68-77	ISTA-1100
1-FCV-3-188B	ISTA-1100
1-VTV-68-228	ISTC-1200(a)
1-VTV-68-230	ISTC-1200(a)
1-VTV-68-236	ISTC-1200(a)
1-VTV-68-240	ISTC-1200(a)
1-VTV-68-242	ISTC-1200(a)
1-VTV-68-244	ISTC-1200(a)
1-RTV-68-277A	ISTC-1200(c)
1-RTV-68-278A	ISTC-1200(c)
1-RTV-68-279A	ISTC-1200(c)
1-RTV-68-280A	ISTC-1200(c)
1-RTV-68-281A	ISTC-1200(c)
1-RTV-68-282A	ISTC-1200(c)
1-RTV-68-283A	ISTC-1200(c)
1-RTV-68-284A	ISTC-1200(c)
1-RTV-68-285A	ISTC-1200(c)
1-RTV-68-286A	ISTC-1200(c)
1-RTV-68-287A	ISTC-1200(c)
1-VTV-10-500	ISTC-1200(a)
1-VTV-10-501	ISTC-1200(a)
1-VTV-10-502	ISTA-1100
1-DRV-68-506	ISTC-1200(a)
1-SHV-68-507	ISTA-1100
1-DRV-68-521	ISTC-1200(a)
1-SHV-68-522	ISTA-1100
1-TV-73-555	ISTC-1200(a)
1-TV-73-557	ISTC-1200(a)
1-TV-68-561	ISTC-1200(a)
1-TV-68-563	ISTC-1200(a)
1-TV-68-565	ISTC-1200(a)
1-TV-68-567	ISTC-1200(a)
1-SHV-43-599	ISTC-1200(a)
1-TV-43-815A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-68-227	ISTC-1200(a)
1-SHV-68-229	ISTC-1200(a)
1-SHV-68-233	ISTC-1200(a)
1-VTV-68-234	ISTC-1200(a)
1-SHV-68-235	ISTC-1200(a)
1-SHV-68-237	ISTC-1200(a)
1-VTV-68-238	ISTC-1200(a)
1-SHV-68-239	ISTC-1200(a)
1-SHV-68-241	ISTC-1200(a)
1-SHV-68-243	ISTC-1200(a)
1-SHV-68-249	ISTC-1200(a)
1-VTV-68-250	ISTC-1200(a)
1-SHV-68-251	ISTC-1200(a)
1-VTV-68-252	ISTC-1200(a)
1-SHV-68-253	ISTC-1200(a)
3-VTV-68-254	ISTC-1200(a)
1-SHV-68-255	ISTC-1200(a)
1-VTV-68-256	ISTC-1200(a)
1-SHV-68-505	ISTC-1200(a)
1-SHV-68-520	ISTC-1200(a)
1-SHV-68-560	ISTC-1200(a)
1-SHV-68-562	ISTC-1200(a)
1-SHV-68-564	ISTC-1200(a)
1-SHV-68-566	ISTC-1200(a)
1-SHV-43-725	ISTC-1200(a)
1-DRV-68-802	ISTC-1200(c)
1-TV-43-1057	ISTC-1200(a)
1-VTV-68-6601	ISTC-1200(a)
1-SHV-68-6602	ISTC-1200(a)
1-SHV-68-6603	ISTC-1200(a)
1-VTV-68-6604	ISTC-1200(a)
1-SHV-68-6605	ISTC-1200(a)
1-SHV-68-6606	ISTC-1200(a)
1-SHV-68-6607	ISTC-1200(a)
1-VTV-68-6608	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 1-47E820-2

VALVE ID	EXEMPTION BASIS
1-FCV-85-39A (185 Typical)	ISTC-1200skid
1-CKV-85-597 (185 Typical)	ISTC-1200skid
1-CKV-85-616 (185 Typical)	ISTC-1200skid

VALVE ID	EXEMPTION BASIS
1-FCV-85-39B (185 Typical)	ISTC-1200skid
1-FCV-85-40A (185 Typical)	ISTC-1200skid
1-FCV-85-40B (185 Typical)	ISTC-1200skid
1-FCV-85-40C (185 Typical)	ISTC-1200skid

VALVE ID	EXEMPTION BASIS
1-FCV-85-40D (185 Typical)	ISTC-1200skid
1-SHV-85-612 (185 Typical)	ISTC-1200(c)
1-SHV-85-615 (185 Typical)	ISTC-1200(c)
1-SHV-85-617 (185 Typical)	ISTC-1200(c)

Flow Diagram: 1-47E820-6

VALVE ID	EXEMPTION BASIS
1-RTV-85-273A	ISTC-1200(a)
1-RTV-85-274A	ISTC-1200(a)
1-RTV-85-275A	ISTC-1200(a)
1-RTV-85-276A	ISTC-1200(a)
1-RTV-85-277A	ISTC-1200(a)
1-RTV-85-278A	ISTC-1200(a)
1-RTV-85-279A	ISTC-1200(a)
1-RTV-85-280A	ISTC-1200(a)
1-RTV-85-281A	ISTC-1200(a)
1-RTV-85-282A	ISTC-1200(a)
1-RTV-85-283A	ISTC-1200(a)
1-RTV-85-284A	ISTC-1200(a)
1-RTV-85-285A	ISTC-1200(a)
1-RTV-85-286A	ISTC-1200(a)
1-RTV-85-287A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-85-45A1	ISTC-1200(c)
1-SHV-85-45A5	ISTC-1200(c)
1-SHV-85-45B1	ISTC-1200(c)
1-SHV-85-45B5	ISTC-1200(c)
1-SHV-85-45C1	ISTC-1200(c)
1-SHV-85-45C5	ISTC-1200(c)
1-SHV-85-45D1	ISTC-1200(c)
1-SHV-85-45D5	ISTC-1200(c)
1-SHV-85-45E1	ISTC-1200(c)
1-SHV-85-45E5	ISTC-1200(c)
1-SHV-85-45F1	ISTC-1200(c)
1-SHV-85-45F5	ISTC-1200(c)
1-SHV-85-45G1	ISTC-1200(c)
1-SHV-85-45G5	ISTC-1200(c)
1-SHV-85-45H1	ISTC-1200(c)
1-RTV-85-288A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-TV-85-45/07	ISTC-1200(a)
1-TV-85-45/08	ISTC-1200(a)
1-VTV-85-45/11	ISTC-1200(a)
1-VTV-85-45/12	ISTC-1200(a)
1-TV-85-45/13	ISTC-1200(a)
1-TV-85-45/14	ISTC-1200(a)
1-SHV-85-45A3	ISTC-1200(a)
1-SHV-85-45B3	ISTC-1200(a)
1-SHV-85-45C3	ISTC-1200(a)
1-SHV-85-45D3	ISTC-1200(a)
1-SHV-85-45E3	ISTC-1200(a)
1-SHV-85-45F3	ISTC-1200(a)
1-SHV-85-45G3	ISTC-1200(a)
1-SHV-85-45H3	ISTC-1200(a)
1-SHV-85-45H5	ISTC-1200(c)
1-SHV-85-664	ISTC-1200(c)

Flow Diagram: 1-47E822-1

VALVE ID	EXEMPTION BASIS
1-DRV-70-507	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-DRV-70-559	ISTC-1200(a)

Flow Diagram: 1-47E852-1

VALVE ID	EXEMPTION BASIS
1-TV-77-619	ISTC-1200(a)

Flow Diagram: 1-47E852-2

VALVE ID	EXEMPTION BASIS
1-SHV-77-643	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 1-47E854-1

VALVE ID	EXEMPTION BASIS
1-SHV-63-12	ISTC-1200(c)
1-DRV-63-13	ISTC-1200(a)
1-SHV-63-14	ISTC-1200(a)
1-SHV-63-500	ISTC-1200(a)
1-DRV-63-522	ISTC-1200(a)
1-DRV-63-537	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-SHV-63-506	ISTC-1200(c)
1-SHV-63-507	ISTC-1200(c)
1-SHV-63-515	ISTC-1200(c)
1-SHV-63-517	ISTC-1200(c)
1-THV-63-518	ISTC-1200(a)
1-SHV-63-524	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-RTV-63-7	ISTC-1200(a)
1-VTV-63-7	ISTC-1200(a)
1-RTV-63-11H	ISTC-1200(a)
1-RTV-63-11L	ISTC-1200(a)
1-SHV-63-538	ISTC-1200(a)
1-SHV-63-539	ISTC-1200(a)
1-SHV-63-540	ISTC-1200(a)

Flow Diagram: 1-47E855-1

VALVE ID	EXEMPTION BASIS
1-FCV-78-62	ISTA-1100
1-SHV-78-524	ISTA-1100
1-CKV-78-526	ISTA-1100
1-CKV-78-545	ISTA-1100
1-CKV-78-546	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-DRV-78-553	ISTA-1100
1-DRV-78-555	ISTA-1100
1-DRV-78-557	ISTA-1100
1-DRV-78-559	ISTA-1100
1-DRV-78-560	ISTA-1100

VALVE ID	EXEMPTION BASIS
1-FCV-78-68	ISTA-1100
1-RTV-78-225A	ISTC-1200(a)
1-SHV-78-529	ISTC-1200(a)
1-VTV-78-581	ISTC-1200(a)
1-VTV-78-582	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 1-47E858-1

VALVE ID	EXEMPTION BASIS
1-SHV-23-31	ISTC-1200(c)
1-SHV-23-37	ISTC-1200(c)
1-SHV-23-43	ISTC-1200(c)
1-SHV-23-49	ISTC-1200(c)
0-RTV-23-203A	ISTC-1200(a)
0-RTV-23-215A	ISTC-1200(a)
1-RTV-23-224A	ISTC-1200(a)
0-RTV-23-227A	ISTC-1200(a)
0-SHV-23-503	ISTC-1200(c)
0-SHV-23-507	ISTC-1200(c)
1-DRV-23-511	ISTC-1200(a)
0-SHV-23-523	ISTC-1200(c)
0-SHV-23-527	ISTC-1200(c)
0-SHV-23-543	ISTC-1200(c)
0-SHV-23-547	ISTC-1200(c)
0-SHV-23-562	ISTC-1200(c)
0-SHV-23-566	ISTC-1200(c)
1-SMV-23-583	ISTC-1200(c)
1-SMV-23-584	ISTC-1200(c)
1-SMV-23-585	ISTC-1200(c)
1-SMV-23-586	ISTC-1200(c)
0-SHV-23-589	ISTC-1200(c)
0-SHV-23-592	ISTC-1200(c)
0-SHV-23-595	ISTC-1200(c)
0-SHV-23-598	ISTC-1200(c)
0-SHV-23-602	ISTA-1100
0-SHV-23-604	ISTA-1100
0-SHV-23-606	ISTA-1100
0-SHV-23-608	ISTA-1100

VALVE ID	EXEMPTION BASIS
0-RTV-23-201A	ISTC-1200(a)
0-RTV-23-202A	ISTC-1200(a)
0-RTV-23-205A	ISTC-1200(a)
0-RTV-23-206A	ISTC-1200(a)
0-RTV-23-207A	ISTC-1200(a)
0-RTV-23-209A	ISTC-1200(a)
0-RTV-23-210A	ISTC-1200(a)
0-RTV-23-211A	ISTC-1200(a)
0-RTV-23-213A	ISTC-1200(a)
0-RTV-23-214A	ISTC-1200(a)
1-RTV-23-217A	ISTC-1200(a)
1-RTV-23-218A	ISTC-1200(a)
1-RTV-23-219A	ISTC-1200(a)
1-RTV-23-220A	ISTC-1200(a)
1-RTV-23-222A	ISTC-1200(a)
0-RTV-23-225A	ISTC-1200(a)
0-RTV-23-226A	ISTC-1200(a)
1-DRV-23-531	ISTC-1200(a)
1-VTV-23-537	ISTC-1200(a)
1-VTV-23-538	ISTC-1200(a)
1-DRV-23-551	ISTC-1200(a)
1-DRV-23-570	ISTC-1200(a)
3-DRV-23-760	ISTC-1200(a)
3-DRV-23-762	ISTC-1200(a)
1-DRV-23-765	ISTC-1200(a)
0-SMV-23-5102	ISTC-1200(a)
0-SMV-23-5103	ISTC-1200(a)
0-SMV-23-5104	ISTC-1200(a)
0-SMV-23-5105	ISTC-1200(a)
1-SMV-23-5109	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
0-RTV-23-204A	ISTC-1200(a)
0-RTV-23-208A	ISTC-1200(a)
0-RTV-23-212A	ISTC-1200(a)
0-RTV-23-216A	ISTC-1200(a)
1-RTV-23-221A	ISTC-1200(a)
1-RTV-23-223A	ISTC-1200(a)
0-RTV-23-228A	ISTC-1200(a)
1-SHV-23-515	ISTC-1200(a)
1-VTV-23-517	ISTC-1200(a)
1-VTV-23-518	ISTC-1200(a)
1-SHV-23-535	ISTC-1200(a)
1-SHV-23-554	ISTC-1200(a)
1-VTV-23-556	ISTC-1200(a)
1-VTV-23-557	ISTC-1200(a)
1-SHV-23-573	ISTC-1200(a)
1-VTV-23-575	ISTC-1200(a)
1-VTV-23-576	ISTC-1200(a)
2-VTV-23-748	ISTC-1200(a)
2-VTV-23-749	ISTC-1200(a)
1-VTV-23-750	ISTC-1200(a)
1-VTV-23-751	ISTC-1200(a)
3-VTV-23-752	ISTC-1200(a)
3-VTV-23-753	ISTC-1200(a)
3-VTV-23-754	ISTC-1200(a)
3-VTV-23-755	ISTC-1200(a)
3-DRV-23-761	ISTC-1200(a)
3-DRV-23-763	ISTC-1200(a)
1-DRV-23-764	ISTC-1200(a)
2-DRV-23-770	ISTC-1200(a)
2-DRV-23-771	ISTC-1200(a)

Flow Diagram: 1-47E859-1

VALVE ID	EXEMPTION BASIS
0-FCV-67-13	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
0-RTV-67-202A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
0-RTV-67-201A	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
0-FCV-67-14	ISTC-1200(c)
0-FCV-67-17	ISTC-1200(c)
0-FCV-67-18	ISTC-1200(c)
0-FCV-67-21	ISTC-1200(c)
0-FCV-67-22	ISTC-1200(c)
0-FCV-67-25	ISTC-1200(c)
0-FCV-67-26	ISTC-1200(c)
0-SHV-67-503	ISTC-1200(c)
0-SHV-67-511	ISTC-1200(c)
0-SHV-67-513	ISTC-1200(c)
0-SHV-67-518	ISTC-1200(c)
0-SHV-67-520	ISTC-1200(c)
0-SHV-67-525	ISTC-1200(c)
0-SHV-67-527	ISTC-1200(c)
0-SHV-67-532	ISTC-1200(c)
0-SHV-67-536	ISTA-1100
1-SHV-67-540	ISTC-1200(c)
2-SHV-67-540	ISTC-1200(c)
1-SHV-67-550	ISTC-1200(c)
1-SHV-67-551	ISTC-1200(b)
1-SHV-67-553	ISTC-1200(c)
1-SHV-67-557	ISTC-1200(c)
2-SHV-67-557	ISTC-1200(c)
1-SHV-67-560	ISTC-1200(c)
1-THV-67-561	ISTC-1200(b)
1-SHV-67-562	ISTC-1200(c)
1-SHV-67-565	ISTC-1200(b)
1-SHV-67-566	ISTC-1200(c)
1-SHV-67-567	ISTC-1200(c)
1-SHV-67-569	ISTC-1200(c)
1-SHV-67-570	ISTC-1200(c)
1-SHV-67-571	ISTC-1200(c)
1-THV-67-572	ISTC-1200(b)
1-SHV-67-574	ISTC-1200(c)
1-SHV-67-575	ISTA-1100

VALVE ID	EXEMPTION BASIS
0-RTV-67-203A	ISTC-1200(a)
0-RTV-67-205A	ISTC-1200(a)
0-RTV-67-207A	ISTC-1200(a)
0-RTV-67-211A	ISTC-1200(a)
0-RTV-67-214A	ISTC-1200(a)
0-RTV-67-215A	ISTC-1200(a)
0-RTV-67-217A	ISTC-1200(a)
0-RTV-67-219A	ISTC-1200(a)
0-RTV-67-221A	ISTC-1200(a)
0-RTV-67-223A	ISTC-1200(a)
0-RTV-67-226A	ISTC-1200(a)
0-RTV-67-227A	ISTC-1200(a)
0-RTV-67-229A	ISTC-1200(a)
0-RTV-67-230A	ISTC-1200(a)
0-RTV-67-231A	ISTC-1200(a)
0-RTV-67-233A	ISTC-1200(a)
0-RTV-67-263A	ISTC-1200(a)
0-RTV-67-267A	ISTC-1200(a)
0-RTV-67-269A	ISTC-1200(a)
0-RTV-67-270A	ISTC-1200(a)
0-RTV-67-271A	ISTC-1200(a)
0-RTV-67-273A	ISTC-1200(a)
0-RTV-67-275A	ISTC-1200(a)
0-RTV-67-278A	ISTC-1200(a)
0-DRV-67-516	ISTC-1200(a)
0-DRV-67-523	ISTC-1200(a)
0-VTV-67-524	ISTC-1200(a)
3-SHV-67-540	ISTC-1200(c)
1-DRV-67-552	ISTC-1200(a)
3-SHV-67-557	ISTC-1200(c)
1-VTV-67-564	ISTC-1200(a)
1-DRV-67-573	ISTC-1200(a)
3-SHV-67-575	ISTA-1100
3-SHV-67-583	ISTC-1200(c)
1-DRV-67-595	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
0-RTV-67-204A	ISTC-1200(a)
0-RTV-67-206A	ISTC-1200(a)
0-RTV-67-208A	ISTC-1200(a)
0-RTV-67-209A	ISTC-1200(a)
0-RTV-67-210A	ISTC-1200(a)
0-RTV-67-212A	ISTC-1200(a)
0-RTV-67-213A	ISTC-1200(a)
0-RTV-67-216A	ISTC-1200(a)
0-RTV-67-218A	ISTC-1200(a)
0-RTV-67-220A	ISTC-1200(a)
0-RTV-67-222A	ISTC-1200(a)
0-RTV-67-224A	ISTC-1200(a)
0-RTV-67-225A	ISTC-1200(a)
0-RTV-67-228A	ISTC-1200(a)
0-RTV-67-232A	ISTC-1200(a)
0-RTV-67-242A	ISTC-1200(a)
0-RTV-67-264A	ISTC-1200(a)
0-RTV-67-268A	ISTC-1200(a)
0-RTV-67-272A	ISTC-1200(a)
0-RTV-67-274A	ISTC-1200(a)
0-RTV-67-276A	ISTC-1200(a)
0-RTV-67-277A	ISTC-1200(a)
0-DRV-67-509	ISTC-1200(a)
0-VTV-67-510	ISTC-1200(a)
0-VTV-67-517	ISTC-1200(a)
0-DRV-67-530	ISTC-1200(a)
0-VTV-67-531	ISTC-1200(a)
0-DRV-67-534	ISTC-1200(a)
0-DRV-67-535	ISTC-1200(a)
1-DRV-67-563	ISTC-1200(a)
1-DRV-67-568	ISTC-1200(a)
3-DRV-67-582	ISTC-1200(a)
1-DRV-67-582	ISTC-1200(a)
2-DRV-67-582	ISTC-1200(a)
1-VTV-67-589	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
2-SHV-67-575	ISTA-1100
1-SHV-67-583	ISTC-1200(c)
2-SHV-67-583	ISTC-1200(c)
1-SHV-67-593	ISTC-1200(c)
1-SHV-67-594	ISTC-1200(b)
1-SHV-67-596	ISTC-1200(c)
1-SHV-67-599	ISTC-1200(c)
2-SHV-67-599	ISTC-1200(c)
1-SHV-67-602	ISTC-1200(c)
1-THV-67-603	ISTC-1200(b)
1-SHV-67-605	ISTC-1200(c)
1-SHV-67-606	ISTC-1200(b)
1-SHV-67-607	ISTC-1200(c)
1-SHV-67-609	ISTC-1200(c)
1-SHV-67-610	ISTC-1200(c)
1-SHV-67-611	ISTC-1200(c)
1-SHV-67-613	ISTC-1200(c)
1-THV-67-614	ISTC-1200(b)
1-SHV-67-616	ISTC-1200(c)
0-SHV-67-623	ISTC-1200(c)
0-SHV-67-626	ISTC-1200(c)
0-SHV-67-629	ISTC-1200(c)
0-SHV-67-633	ISTC-1200(c)
1-SHV-67-637	ISTC-1200(c)
2-SHV-67-637	ISTC-1200(c)
1-SHV-67-640	ISTA-1100
2-SHV-67-640	ISTA-1100
0-SHV-67-643	ISTA-1100
0-SHV-67-644	ISTA-1100
1-SHV-67-647	ISTC-1200(c)
2-SHV-67-647	ISTC-1200(c)
0-SHV-67-650	ISTA-1100
1-SHV-67-655	ISTC-1200(c)
2-SHV-67-655	ISTC-1200(c)
1-SHV-67-658	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-SHV-67-599	ISTC-1200(c)
1-DRV-67-615	ISTC-1200(a)
0-DRV-67-632	ISTC-1200(a)
0-DRV-67-636	ISTC-1200(a)
3-SHV-67-637	ISTC-1200(c)
3-SHV-67-640	ISTA-1100
0-DRV-67-645	ISTC-1200(a)
3-SHV-67-647	ISTC-1200(c)
3-DRV-67-654	ISTC-1200(a)
3-SHV-67-655	ISTC-1200(c)
3-SHV-67-658	ISTC-1200(c)
2-SHV-67-658	ISTC-1200(c)
0-VTV-67-669	ISTC-1200(a)
0-DRV-67-670	ISTC-1200(a)
0-VTV-67-684	ISTC-1200(a)
0-VTV-67-685	ISTC-1200(a)
0-VTV-67-686	ISTC-1200(a)
3-SHV-67-743	ISTC-1200(c)
3-SHV-67-744	ISTC-1200(c)
3-SHV-67-756	ISTC-1200(c)
3-SHV-67-757	ISTC-1200(c)
1-SHV-67-831	ISTC-1200(a)
1-SHV-67-832	ISTC-1200(a)
2-SHV-67-833	ISTC-1200(a)
2-SHV-67-834	ISTC-1200(a)
3-SHV-67-835	ISTC-1200(a)
3-SHV-67-836	ISTC-1200(a)
1-DRV-67-959	ISTC-1200(a)
1-VTV-67-960	ISTC-1200(a)
1-DRV-67-961	ISTC-1200(a)
1-VTV-67-962	ISTC-1200(a)
1-VTV-67-963	ISTC-1200(a)
1-VTV-67-965	ISTC-1200(a)
1-VTV-67-967	ISTC-1200(a)
0-VTV-67-969	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-DRV-67-604	ISTC-1200(a)
1-VTV-67-612	ISTC-1200(a)
0-VTV-67-617	ISTC-1200(a)
2-DRV-67-654	ISTC-1200(a)
1-DRV-67-654	ISTC-1200(a)
1-VTV-67-745	ISTC-1200(a)
1-VTV-67-746	ISTC-1200(a)
1-VTV-67-747	ISTC-1200(a)
0-VTV-67-748	ISTC-1200(a)
1-VTV-67-752	ISTC-1200(a)
1-VTV-67-753	ISTC-1200(a)
1-SHV-67-815	ISTC-1200(a)
1-SHV-67-816	ISTC-1200(a)
1-SHV-67-817	ISTC-1200(a)
1-SHV-67-818	ISTC-1200(a)
1-SHV-67-819	ISTC-1200(a)
1-SHV-67-820	ISTC-1200(a)
1-SHV-67-825	ISTC-1200(a)
1-SHV-67-826	ISTC-1200(a)
1-SHV-67-827	ISTC-1200(a)
1-SHV-67-828	ISTC-1200(a)
1-SHV-67-829	ISTC-1200(a)
1-SHV-67-830	ISTC-1200(a)
1-DRV-67-964	ISTC-1200(a)
1-DRV-67-966	ISTC-1200(a)
1-DRV-67-968	ISTC-1200(a)
3-SHV-67-5000	ISTC-1200(c)
3-SHV-67-5001	ISTC-1200(c)
3-DRV-67-5018	ISTC-1200(a)
3-DRV-67-5019	ISTC-1200(a)
1-SHV-67-6009	ISTC-1200(a)
0-RTV-67-6010A	ISTC-1200(a)
0-TV-67-6011	ISTC-1200(a)
0-RTV-67-6013A	ISTC-1200(a)
1-RTV-67-6020A	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

VALVE ID	EXEMPTION BASIS
0-THV-67-858	ISTC-1200(b)
0-THV-67-859	ISTC-1200(b)
0-THV-67-860	ISTC-1200(b)
0-THV-67-861	ISTC-1200(b)
1-SHV-67-5000	ISTC-1200(a)
1-SHV-67-5001	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
0-VTV-67-970	ISTC-1200(a)
0-VTV-67-971	ISTC-1200(a)
1-VTV-67-972	ISTC-1200(a)
1-DRV-67-973	ISTC-1200(a)
0-TV-67-6012	ISTC-1200(a)
0-DRV-67-6028	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-RTV-67-6021A	ISTC-1200(a)
1-SHV-67-6022	ISTC-1200(a)
0-SMV-67-7003	ISTC-1200(a)
0-SMV-67-7004	ISTC-1200(a)
0-SMV-67-7005	ISTC-1200(a)
0-SMV-67-7006	ISTC-1200(a)

Flow Diagram: 1-47E865-1

VALVE ID	EXEMPTION BASIS
1-RTV-64-208A	ISTC-1200(c)
1-RTV-64-211A	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-RTV-64-213A	ISTC-1200(c)
1-SHV-64-676	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
1-SHV-64-680	ISTC-1200(c)
1-SHV-64-684	ISTC-1200(c)
1-SHV-64-686	ISTC-1200(c)

Flow Diagram: 1-47E867-3

VALVE ID	EXEMPTION BASIS
1-TV-43-165	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
1-TV-43-178	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 2-47E2820-6

VALVE ID	EXEMPTION BASIS
2-SHV-85-45A1	ISTC-1200(c)
2-SHV-85-45A5	ISTC-1200(c)
2-SHV-85-45B1	ISTC-1200(c)
2-RTV-85-273	ISTC-1200(a)
2-RTV-85-274	ISTC-1200(a)
2-RTV-85-275	ISTC-1200(a)
2-RTV-85-276	ISTC-1200(a)
2-RTV-85-277	ISTC-1200(a)
2-RTV-85-278	ISTC-1200(a)
2-RTV-85-279	ISTC-1200(a)
2-RTV-85-280	ISTC-1200(a)
2-RTV-85-281	ISTC-1200(a)
2-RTV-85-282	ISTC-1200(a)
2-RTV-85-283	ISTC-1200(a)
2-RTV-85-284	ISTC-1200(a)
2-RTV-85-285	ISTC-1200(a)
2-RTV-85-286	ISTC-1200(a)
2-RTV-85-287	ISTC-1200(a)
2-RTV-85-288	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-SHV-85-45A1	ISTC-1200(c)
3-SHV-85-45A5	ISTC-1200(c)
3-SHV-85-45B1	ISTC-1200(c)
3-SHV-85-45B5	ISTC-1200(c)
3-SHV-85-45C1	ISTC-1200(c)
2-SHV-85-45C5	ISTC-1200(c)
3-SHV-85-45C5	ISTC-1200(c)
3-SHV-85-45D1	ISTC-1200(c)
2-SHV-85-45D1	ISTC-1200(c)
2-SHV-85-45D5	ISTC-1200(c)
3-SHV-85-45D5	ISTC-1200(c)
3-SHV-85-45E1	ISTC-1200(c)
2-SHV-85-45E1	ISTC-1200(c)
2-SHV-85-45E5	ISTC-1200(c)
2-SHV-85-45F1	ISTC-1200(c)
2-SHV-85-45F5	ISTC-1200(c)
2-SHV-85-45G1	ISTC-1200(c)
2-SHV-85-45G5	ISTC-1200(c)
2-SHV-85-45H1	ISTC-1200(c)
2-SHV-85-45H5	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-TV-85-45/07	ISTC-1200(a)
2-TV-85-45/08	ISTC-1200(a)
2-SHV-85-45/11	ISTC-1200(a)
2-SHV-85-45/12	ISTC-1200(a)
2-SHV-85-45A3	ISTC-1200(a)
2-SHV-85-45B3	ISTC-1200(a)
2-SHV-85-45C3	ISTC-1200(a)
2-SHV-85-45D3	ISTC-1200(a)
2-SHV-85-45E3	ISTC-1200(a)
3-SHV-85-45E5	ISTC-1200(c)
3-SHV-85-45F1	ISTC-1200(c)
2-SHV-85-45F3	ISTC-1200(a)
3-SHV-85-45F5	ISTC-1200(c)
3-SHV-85-45G1	ISTC-1200(c)
2-SHV-85-45G3	ISTC-1200(a)
3-SHV-85-45G5	ISTC-1200(c)
3-SHV-85-45H1	ISTC-1200(c)
2-SHV-85-45H3	ISTC-1200(a)
3-SHV-85-45H5	ISTC-1200(c)
2-SHV-85-664	ISTC-1200(c)

Flow Diagram: 2-47E2865-12

VALVE ID	EXEMPTION BASIS
2-RTV-64-208A	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-64-211	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-64-213	ISTC-1200(c)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 2-47E801-1

VALVE ID	EXEMPTION BASIS
2-RTV-1-249A	ISTC-1200(a)
2-RTV-1-250A	ISTC-1200(a)
2-RTV-1-251A	ISTC-1200(a)
2-RTV-1-252A	ISTC-1200(a)
2-RTV-1-253A	ISTC-1200(a)
2-RTV-1-254A	ISTC-1200(a)
2-RTV-1-255A	ISTC-1200(a)
2-RTV-1-256A	ISTC-1200(a)
2-BOV-1-525	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-1-216A	ISTC-1200(a)
2-TV-1-505	ISTC-1200(a)
2-SMV-1-507	ISTA-1100
2-SMV-1-515	ISTA-1100
2-SMV-1-534	ISTA-1100
2-SMV-1-542	ISTA-1100
2-SHV-1-735	ISTC-1200(a)
2-SHV-1-736	ISTC-1200(a)
2-VTV-1-739	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-RTV-1-215A	ISTC-1200(a)
2-RTV-1-506	ISTC-1200(a)
2-TV-1-513	ISTC-1200(a)
2-TV-1-518	ISTC-1200(a)
2-DRV-1-521	ISTC-1200(a)
2-DRV-1-527	ISTC-1200(a)
2-TV-1-540	ISTC-1200(a)
2-VTV-1-738	ISTC-1200(a)
2-SHV-1-9222	ISTC-1200(a)
2-TV-1-9223	ISTC-1200(a)

Flow Diagram: 2-47E801-2

VALVE ID	EXEMPTION BASIS
2-FCV-6-113	ISTA-1100
2-FCV-6-114	ISTA-1100
2-FCV-1-125	ISTA-1100
2-FCV-1-133	ISTA-1100
2-FCV-1-141	ISTA-1100
2-FCV-1-155	ISTA-1100
2-FCV-1-156	ISTA-1100
2-FCV-1-172	ISTA-1100
2-FCV-1-173	ISTA-1100
2-FCV-1-176A	ISTA-1100
2-FCV-1-176B	ISTA-1100
2-CKV-1-606	ISTA-1100
2-CKV-1-609	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-FCV-1-178A	ISTA-1100
2-FCV-1-178B	ISTA-1100
2-RTV-6-291A	ISTC-1200(a)
2-DRV-1-590	ISTC-1200(a)
2-DRV-1-595	ISTC-1200(a)
2-SHV-1-604	ISTA-1100
2-SHV-1-605	ISTA-1100
2-SHV-1-607	ISTA-1100
2-SHV-1-608	ISTA-1100
2-DRV-1-710	ISTA-1100
2-DRV-1-711	ISTA-1100
2-SHV-1-741	ISTA-1100
2-SHV-1-743	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-RTV-1-217A	ISTC-1200(a)
2-RTV-1-218A	ISTC-1200(a)
2-RTV-1-219A	ISTC-1200(a)
2-RTV-1-220A	ISTC-1200(a)
2-RTV-1-221A	ISTC-1200(a)
2-RTV-1-239A	ISTC-1200(a)
2-RTV-1-241A	ISTC-1200(a)
2-RTV-1-243A	ISTC-1200(a)
2-RTV-6-289A	ISTC-1200(a)
2-RTV-6-290A	ISTC-1200(a)
2-RTV-6-292A	ISTC-1200(a)
2-TV-1-508	ISTC-1200(a)
2-DRV-1-600	ISTC-1200(a)

Flow Diagram: 2-47E803-1

VALVE ID	EXEMPTION BASIS
2-DRV-3-555	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-TV-3-628	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-DRV-3-569	ISTC-1200(a)
2-TV-3-626	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 2-47E803-5

VALVE ID	EXEMPTION BASIS
2-HCV-3-66	ISTC-1200(c)
2-HCV-3-67	ISTC-1200(c)
2-FCV-3-188A	ISTA-1100
2-RTV-3-226A	ISTC-1200(c)
2-RTV-3-227A	ISTC-1200(c)
2-RTV-3-228A	ISTC-1200(c)
2-RTV-3-229A	ISTC-1200(c)
2-RTV-3-231A	ISTC-1200(c)
2-RTV-3-233A	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-3-234A	ISTC-1200(c)
2-RTV-3-235A	ISTC-1200(c)
2-RTV-3-236A	ISTC-1200(c)
2-RTV-3-237A	ISTC-1200(c)
2-RTV-3-240A	ISTC-1200(c)
2-SHV-3-850	ISTC-1200(c)
2-SHV-3-852	ISTC-1200(c)
2-SHV-3-854	ISTC-1200(c)
2-SHV-3-856	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-FCV-3-188B	ISTA-1100
2-DRV-3-559	ISTC-1200(a)
2-DRV-3-560	ISTC-1200(a)
2-VTV-3-561	ISTC-1200(a)
2-VTV-3-562	ISTC-1200(a)
2-DRV-3-573	ISTC-1200(a)
2-DRV-3-574	ISTC-1200(a)
2-VTV-3-575	ISTC-1200(a)
2-VTV-3-576	ISTC-1200(a)

Flow Diagram: 2-47E805-3

VALVE ID	EXEMPTION BASIS
2-SHV-6-823	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-SHV-6-827	ISTA-1100

Flow Diagram: 2-47E807-1

VALVE ID	EXEMPTION BASIS
2-TV-1-532	ISTC-1200(a)

Flow Diagram: 2-47E807-2

VALVE ID	EXEMPTION BASIS
2-DRV-8-514	ISTA-1100
2-DRV-8-515	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-DRV-8-533	ISTA-1100
2-DRV-8-534	ISTA-1100
2-DRV-8-554	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-FCV-1-146	ISTA-1100
2-DRV-8-553	ISTA-1100
2-SHV-8-575	ISTA-1100

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 2-47E810-1

VALVE ID	EXEMPTION BASIS	VALVE ID	EXEMPTION BASIS	VALVE ID	EXEMPTION BASIS
2-VTV-68-240	ISTC-1200(a)	2-VTV-68-227	ISTC-1200(a)	2-VTV-68-230	ISTC-1200(a)
2-VTV-68-241	ISTC-1200(a)	2-VTV-68-228	ISTC-1200(a)	2-VTV-68-231	ISTC-1200(a)
2-VTV-68-242	ISTC-1200(a)	2-VTV-68-229	ISTC-1200(a)	2-VTV-68-232	ISTC-1200(a)
2-VTV-68-243	ISTC-1200(a)	2-VTV-68-251	ISTC-1200(a)	2-VTV-68-233	ISTC-1200(a)
2-VTV-68-244	ISTC-1200(a)	2-VTV-68-253	ISTC-1200(a)	2-VTV-68-234	ISTC-1200(a)
2-VTV-68-245	ISTC-1200(a)	2-VTV-68-255	ISTC-1200(a)	2-VTV-68-235	ISTC-1200(a)
2-VTV-68-246	ISTC-1200(a)	2-VTV-68-260	ISTC-1200(a)	2-VTV-68-236	ISTC-1200(a)
2-VTV-68-247	ISTC-1200(a)	2-VTV-68-261	ISTC-1200(a)	2-VTV-68-238	ISTC-1200(a)
2-VTV-68-248	ISTC-1200(a)	2-VTV-68-262	ISTC-1200(a)	2-VTV-68-239	ISTC-1200(a)
2-VTV-68-249	ISTC-1200(a)	2-VTV-68-263	ISTC-1200(a)	2-VTV-68-250	ISTC-1200(a)
2-TV-69-503	ISTC-1200(a)	2-DRV-68-505	ISTC-1200(a)	2-VTV-68-252	ISTC-1200(a)
2-TV-69-504	ISTC-1200(a)	2-DRV-68-506	ISTC-1200(a)	2-VTV-68-254	ISTC-1200(a)
3-TV-69-504	ISTC-1200(a)	2-DRV-68-520	ISTC-1200(a)	2-VTV-68-256	ISTC-1200(a)
2-SHV-69-551	ISTC-1200(a)	2-DRV-68-521	ISTC-1200(a)	2-VTV-85-755	ISTC-1200(a)
2-TV-68-561	ISTC-1200(a)	2-TV-68-560	ISTC-1200(a)	2-VTV-85-763	ISTC-1200(a)
2-TV-68-565	ISTC-1200(a)	2-TV-68-562	ISTC-1200(a)	2-VTV-68-6601	ISTC-1200(a)
2-TV-68-567	ISTC-1200(a)	2-TV-68-563	ISTC-1200(a)	2-SHV-68-6602	ISTC-1200(a)
2-TV-69-583	ISTC-1200(a)	2-TV-68-564	ISTC-1200(a)	2-SHV-68-6603	ISTC-1200(a)
2-TV-69-584	ISTC-1200(a)	2-TV-68-566	ISTC-1200(a)	2-VTV-68-6604	ISTC-1200(a)
2-TV-69-633	ISTC-1200(a)	2-VTV-85-764A	ISTC-1200(a)	2-SHV-68-6605	ISTC-1200(a)
2-TV-69-634	ISTC-1200(a)	2-VTV-85-765	ISTC-1200(a)	2-SHV-68-6606	ISTC-1200(a)

Flow Diagram: 2-47E811-1

VALVE ID	EXEMPTION BASIS	VALVE ID	EXEMPTION BASIS	VALVE ID	EXEMPTION BASIS
2-SHV-74-10	ISTC-1200(c)	2-RTV-74-200A	ISTC-1200(a)	2-RTV-74-201A	ISTC-1200(a)
2-SHV-74-22	ISTC-1200(c)	2-RTV-74-202A	ISTC-1200(a)	2-RTV-74-203A	ISTC-1200(a)
2-SHV-74-33	ISTC-1200(c)	2-RTV-74-206A	ISTC-1200(a)	2-RTV-74-204A	ISTC-1200(a)
2-SHV-74-44	ISTC-1200(c)	2-RTV-74-207A	ISTC-1200(a)	2-RTV-74-205A	ISTC-1200(a)
2-SHV-74-49	ISTC-1200(c)	2-RTV-74-208A	ISTC-1200(a)	2-RTV-74-209A	ISTC-1200(a)
2-SHV-74-55	ISTC-1200(c)	2-RTV-74-210A	ISTC-1200(a)	2-RTV-74-213A	ISTC-1200(a)
2-SHV-74-69	ISTC-1200(c)	2-RTV-74-211A	ISTC-1200(a)	2-RTV-74-216A	ISTC-1200(a)
2-SHV-74-85	ISTC-1200(c)	2-RTV-74-212A	ISTC-1200(a)	2-RTV-74-217A	ISTC-1200(a)
3-ISV-74-85	ISTC-1200(c)	2-RTV-74-214A	ISTC-1200(a)	2-RTV-74-219A	ISTC-1200(a)
2-SHV-74-86	ISTC-1200(c)	2-RTV-74-215A	ISTC-1200(a)	2-RTV-74-225A	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
2-SHV-74-87	ISTC-1200(c)
2-SHV-74-88	ISTC-1200(c)
2-SHV-74-89	ISTC-1200(c)
2-SHV-74-90	ISTC-1200(c)
2-RTV-43-158	ISTA-1100
2-RTV-74-218A	ISTC-1200(a)
2-DRV-74-525A	ISTC-1200(a)
2-DRV-74-525B	ISTC-1200(a)
2-DRV-74-525C	ISTC-1200(a)
2-DRV-74-525D	ISTC-1200(a)
2-SHV-74-532A	ISTC-1200(a)
2-SHV-74-532B	ISTC-1200(a)
2-SHV-74-532C	ISTC-1200(a)
2-SHV-74-532D	ISTC-1200(a)
2-VTV-74-548A	ISTC-1200(a)
2-VTV-74-548B	ISTC-1200(a)
2-VTV-74-548D	ISTC-1200(a)
2-DRV-74-570A	ISTC-1200(a)
2-DRV-74-570B	ISTC-1200(a)
2-DRV-74-570C	ISTC-1200(a)
2-DRV-74-570D	ISTC-1200(a)
2-DRV-74-573A	ISTC-1200(a)
2-DRV-74-573B	ISTC-1200(a)
2-DRV-74-575A	ISTC-1200(a)
2-DRV-74-575B	ISTC-1200(a)
2-DRV-74-575C	ISTC-1200(a)
2-DRV-74-575D	ISTC-1200(a)
2-DRV-74-622	ISTC-1200(a)
2-DRV-74-624	ISTC-1200(a)
2-TV-74-629B	ISTC-1200(a)
2-SHV-74-660	ISTC-1200(c)
2-CKV-74-669	ISTA-1100
2-SHV-74-672	ISTC-1200(a)
2-CKV-74-674	ISTA-1100
2-CKV-74-680A	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-RTV-74-220A	ISTC-1200(a)
2-DRV-74-504A	ISTC-1200(a)
2-DRV-74-504B	ISTC-1200(a)
2-DRV-74-504C	ISTC-1200(a)
2-DRV-74-504D	ISTC-1200(a)
2-VTV-74-506B	ISTC-1200(a)
2-VTV-74-506D	ISTC-1200(a)
2-VTV-74-514A	ISTC-1200(a)
2-VTV-74-514B	ISTC-1200(a)
2-VTV-74-514C	ISTC-1200(a)
2-VTV-74-514D	ISTC-1200(a)
2-VTV-74-546A	ISTC-1200(a)
2-VTV-74-546B	ISTC-1200(a)
2-VTV-74-546C	ISTC-1200(a)
2-VTV-74-546D	ISTC-1200(a)
2-VTV-74-548C	ISTC-1200(a)
2-DRV-74-552A	ISTC-1200(a)
2-DRV-74-552B	ISTC-1200(a)
2-DRV-74-552C	ISTC-1200(a)
2-DRV-74-552D	ISTC-1200(a)
2-DRV-74-566A	ISTC-1200(a)
2-DRV-74-566B	ISTC-1200(a)
2-DRV-74-566C	ISTC-1200(a)
2-DRV-74-566D	ISTC-1200(a)
2-DRV-74-568A	ISTC-1200(a)
2-DRV-74-568B	ISTC-1200(a)
2-DRV-74-568C	ISTC-1200(a)
2-DRV-74-568D	ISTC-1200(a)
2-DRV-74-581A	ISTC-1200(a)
2-DRV-74-581B	ISTC-1200(a)
2-DRV-74-581C	ISTC-1200(a)
2-DRV-74-581D	ISTC-1200(a)
2-DRV-74-588A	ISTC-1200(a)
2-DRV-74-588B	ISTC-1200(a)
2-DRV-74-593A	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-SHV-74-251A	ISTC-1200(c)
2-SHV-74-251B	ISTC-1200(c)
2-SHV-74-251C	ISTC-1200(c)
2-SHV-74-251D	ISTC-1200(c)
2-SHV-74-252A	ISTC-1200(c)
2-SHV-74-252B	ISTC-1200(c)
2-SHV-74-252C	ISTC-1200(c)
2-SHV-74-252D	ISTC-1200(c)
2-TV-74-253A	ISTC-1200(a)
2-TV-74-253B	ISTC-1200(a)
2-TV-74-253C	ISTC-1200(a)
2-TV-74-253D	ISTC-1200(a)
2-TV-74-254A	ISTC-1200(a)
2-TV-74-254B	ISTC-1200(a)
2-TV-74-254C	ISTC-1200(a)
2-TV-74-254D	ISTC-1200(a)
2-VTV-74-506A	ISTC-1200(a)
2-VTV-74-506C	ISTC-1200(a)
2-SHV-74-512A	ISTC-1200(a)
2-SHV-74-512B	ISTC-1200(a)
2-SHV-74-512C	ISTC-1200(a)
2-SHV-74-512D	ISTC-1200(a)
2-VTV-74-579A	ISTC-1200(a)
2-VTV-74-579C	ISTC-1200(a)
2-VTV-74-584A	ISTC-1200(a)
2-VTV-74-584B	ISTC-1200(a)
2-VTV-74-584C	ISTC-1200(a)
2-VTV-74-584D	ISTC-1200(a)
2-VTV-74-590A	ISTC-1200(a)
2-VTV-74-590B	ISTC-1200(a)
2-VTV-74-606	ISTC-1200(a)
2-VTV-74-614	ISTC-1200(a)
2-VTV-74-633A	ISTC-1200(a)
2-VTV-74-633B	ISTC-1200(a)
2-DRV-74-649	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
2-CKV-74-680B	ISTA-1100
2-CKV-74-698	ISTA-1100
2-CKV-74-705	ISTA-1100
2-CKV-74-706	ISTA-1100
2-VTV-74-711A	ISTC-1200(a)
2-VTV-74-711B	ISTC-1200(a)
2-CKV-74-728	ISTA-1100
2-SHV-74-729	ISTC-1200(a)
2-SHV-74-746	ISTC-1200(a)
2-SHV-74-747	ISTC-1200(a)
2-SHV-74-748A	ISTC-1200(a)
2-SHV-74-748B	ISTC-1200(a)
2-SHV-74-749A	ISTC-1200(a)
2-SHV-74-749B	ISTC-1200(a)
2-SHV-74-749C	ISTC-1200(a)
2-SHV-74-749D	ISTC-1200(a)
2-SHV-74-751	ISTC-1200(a)
2-SHV-74-752	ISTC-1200(a)
2-SHV-74-754	ISTC-1200(c)
2-SHV-74-765A	ISTC-1200(a)
2-SHV-74-765B	ISTC-1200(a)
2-CKV-74-829	ISTA-1100
3-CKV-74-829	ISTA-1100
2-CKV-74-830	ISTA-1100
2-SHV-74-831	ISTC-1200(c)
2-SHV-74-832	ISTC-1200(c)
2-TV-74-834	ISTC-1200(a)
2-TV-74-838	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-DRV-74-593B	ISTC-1200(a)
2-DRV-74-595A	ISTC-1200(a)
2-DRV-74-595B	ISTC-1200(a)
2-VTV-74-597A	ISTC-1200(a)
2-VTV-74-597B	ISTC-1200(a)
2-VTV-74-626A	ISTC-1200(a)
2-VTV-74-626B	ISTC-1200(a)
2-TV-74-629A	ISTC-1200(a)
2-DRV-74-648	ISTC-1200(a)
2-VTV-74-650	ISTC-1200(a)
2-VTV-74-651	ISTC-1200(a)
2-VTV-74-654	ISTC-1200(a)
2-DRV-74-656	ISTC-1200(a)
2-TV-74-663	ISTC-1200(a)
2-TV-74-664	ISTC-1200(a)
2-TV-74-665	ISTC-1200(a)
2-VTV-74-716A	ISTC-1200(a)
2-VTV-74-717B	ISTC-1200(a)
2-TV-74-724	ISTC-1200(a)
2-TV-74-726	ISTC-1200(a)
2-VTV-74-733	ISTC-1200(a)
2-VTV-74-735	ISTC-1200(a)
2-TV-74-755	ISTC-1200(a)
2-TV-74-756	ISTC-1200(a)
2-TV-74-796A	ISTC-1200(a)
2-TV-74-796B	ISTC-1200(a)
2-TV-74-811	ISTC-1200(a)
2-TV-74-836	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-VTV-74-678	ISTC-1200(a)
2-VTV-74-683A	ISTC-1200(a)
2-VTV-74-683B	ISTC-1200(a)
2-VTV-74-707	ISTC-1200(a)
2-VTV-74-734	ISTC-1200(a)
2-VTV-74-736	ISTC-1200(a)
2-TV-74-761A	ISTC-1200(a)
2-TV-74-761B	ISTC-1200(a)
2-VTV-74-775	ISTC-1200(a)
2-VTV-74-777	ISTC-1200(a)
2-SHV-74-793	ISTA-1100
2-TV-74-794A	ISTC-1200(a)
2-TV-74-794B	ISTC-1200(a)
2-TV-74-795A	ISTC-1200(a)
2-TV-74-795B	ISTC-1200(a)
2-TV-74-798A	ISTC-1200(a)
2-TV-74-798B	ISTC-1200(a)
2-SHV-74-801	ISTA-1100
2-TV-74-805	ISTC-1200(a)
2-TV-74-840	ISTC-1200(a)
2-VTV-74-842	ISTC-1200(a)
2-TV-74-844	ISTC-1200(a)
2-SHV-74-848	ISTC-1200(a)
2-SHV-74-849	ISTC-1200(a)
2-SHV-74-850	ISTC-1200(a)
2-SHV-74-851	ISTC-1200(a)
2-SHV-74-852	ISTC-1200(a)
2-SHV-74-853	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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Flow Diagram: 2-47E812-1

VALVE ID	EXEMPTION BASIS
2-LCV-73-5	ISTA-1100
2-LCV-73-8	ISTA-1100
2-FCV-73-18	ISTC-1200skid
2-FCV-73-19	ISTC-1200skid
2-ISV-73-25	ISTC-1200(c)
2-PCV-73-43	ISTC-1200(b)
2-RTV-73-206A	ISTC-1200(a)
2-RTV-73-221A	ISTC-1200(a)
2-RTV-73-224A	ISTC-1200(a)
2-RTV-73-225A	ISTC-1200(a)
2-TV-73-529	ISTC-1200(a)
2-SHV-73-534	ISTC-1200(c)
2-SHV-73-551	ISTC-1200(a)
2-SHV-73-552	ISTC-1200(a)
2-CKV-73-586	ISTA-1100
2-SHV-73-592	ISTC-1200(c)
2-SHV-73-593	ISTC-1200(c)
2-CKV-73-596	ISTA-1100
2-CKV-73-600	ISTC-1200skid
2-SHV-73-608	ISTC-1200(c)
2-CKV-73-629	ISTA-1100
2-DRV-73-631	ISTC-1200(a)
2-SHV-73-642	ISTC-1200(c)
2-TV-73-643	ISTC-1200(a)
2-ISV-73-652	ISTC-1200(c)
2-SHV-73-735	ISTC-1200(c)
2-SHV-73-736	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-73-200A	ISTC-1200(a)
2-RTV-73-202A	ISTC-1200(a)
2-RTV-73-207A	ISTC-1200(a)
2-RTV-73-208A	ISTC-1200(a)
2-RTV-73-210A	ISTC-1200(a)
2-RTV-73-211A	ISTC-1200(a)
2-RTV-73-212A	ISTC-1200(a)
2-TV-73-233	ISTC-1200(a)
2-VTV-73-503	ISTC-1200(a)
2-DRV-73-511	ISTC-1200(a)
2-DRV-73-518	ISTC-1200(a)
2-DRV-73-521	ISTC-1200(a)
2-VTV-73-523	ISTC-1200(a)
2-VTV-73-525	ISTC-1200(a)
2-DRV-73-527	ISTC-1200(a)
2-VTV-73-542	ISTC-1200(a)
2-VTV-73-547	ISTC-1200(a)
2-TV-73-549	ISTC-1200(a)
2-TV-73-560	ISTC-1200(a)
2-TV-73-563	ISTC-1200(a)
2-DRV-73-570	ISTC-1200(a)
2-VTV-73-576	ISTC-1200(a)
2-DRV-73-578	ISTC-1200(a)
2-SHV-73-584	ISTC-1200(a)
2-VTV-73-589	ISTC-1200(a)
2-TV-73-610	ISTC-1200(a)
2-TV-73-628	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-RTV-73-201A	ISTC-1200(a)
2-RTV-73-203A	ISTC-1200(a)
2-RTV-73-204A	ISTC-1200(a)
2-RTV-73-209A	ISTC-1200(a)
2-RTV-73-213A	ISTC-1200(a)
2-DRV-73-501	ISTC-1200(a)
2-DRV-73-507	ISTC-1200(a)
2-VTV-73-513	ISTC-1200(a)
2-TV-73-515	ISTC-1200(a)
2-DRV-73-530	ISTC-1200(a)
2-VTV-73-532	ISTC-1200(a)
2-DRV-73-535	ISTC-1200(a)
2-DRV-73-537	ISTC-1200(a)
2-DRV-73-540	ISTC-1200(a)
2-DRV-73-545	ISTC-1200(a)
2-TV-73-555	ISTC-1200(a)
2-TV-73-557	ISTC-1200(a)
2-TV-73-572	ISTC-1200(a)
2-TV-73-575	ISTC-1200(a)
2-DRV-73-605	ISTC-1200(a)
2-VTV-73-616	ISTC-1200(a)
2-VTV-73-630	ISTC-1200(a)
2-TV-73-637	ISTC-1200(a)
2-TV-73-639	ISTC-1200(a)
2-TV-73-653	ISTC-1200(a)
2-SHV-73-740	ISTC-1200(a)
2-TV-73-741	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 2-47E813-1

VALVE ID	EXEMPTION BASIS
2-RTV-71-1AH	ISTC-1200(a)
2-RTV-71-1AL	ISTC-1200(a)
2-RTV-71-1BH	ISTC-1200(a)
2-RTV-71-1BL	ISTC-1200(a)
2-LCV-71-5	ISTA-1100
2-FCV-71-9	ISTC-1200skid
2-FCV-71-10	ISTC-1200skid
2-PCV-71-22	ISTC-1200(b)
2-SHV-71-520	ISTC-1200(c)
2-VTV-71-529	ISTC-1200(a)
2-VTV-71-530	ISTC-1200(a)
2-CKV-71-564	ISTA-1100
2-SHV-71-570	ISTC-1200(c)
2-SHV-71-571	ISTC-1200(c)
2-CKV-71-574	ISTA-1100
2-SHV-71-578	ISTC-1200(c)
2-SHV-71-579	ISTC-1200(c)
2-SHV-71-601	ISTC-1200(c)
2-SHV-71-608	ISTC-1200(c)
2-SHV-71-617	ISTC-1200(c)
2-SHV-71-618	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-71-4	ISTC-1200(a)
2-RTV-71-5H	ISTC-1200(a)
2-RTV-71-5L	ISTC-1200(a)
2-RTV-71-13A	ISTC-1200(a)
2-RTV-71-13B	ISTC-1200(a)
2-SHV-71-14	ISTC-1200(a)
2-SHV-71-16	ISTC-1200(c)
2-TV-71-19	ISTC-1200(a)
2-SHV-71-19B	ISTC-1200(a)
2-SHV-71-19D	ISTC-1200(a)
2-RTV-71-20	ISTC-1200(a)
2-RTV-71-21	ISTC-1200(a)
2-TV-71-26	ISTC-1200(a)
2-RTV-71-36H	ISTC-1200(a)
2-RTV-71-36L	ISTC-1200(a)
2-TV-71-527	ISTC-1200(a)
2-TV-71-540	ISTC-1200(a)
2-TV-71-548	ISTC-1200(a)
2-SHV-71-551	ISTC-1200(a)
2-SHV-71-553	ISTC-1200(a)
2-SHV-71-581	ISTC-1200(a)
2-SHV-71-593	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-RTV-71-12	ISTC-1200(a)
2-TV-71-14A	ISTC-1200(a)
2-SHV-71-19A	ISTC-1200(a)
2-SHV-71-19C	ISTC-1200(a)
2-SHV-71-26	ISTC-1200(a)
2-RTV-71-35	ISTC-1200(a)
2-SHV-71-40A	ISTC-1200(a)
2-SHV-71-40B	ISTC-1200(a)
2-RTV-71-502	ISTC-1200(a)
2-SHV-71-506	ISTC-1200(a)
2-SHV-71-521	ISTC-1200(a)
2-SHV-71-524	ISTC-1200(a)
2-SHV-71-538	ISTC-1200(a)
2-TV-71-541	ISTC-1200(a)
2-SHV-71-561	ISTC-1200(a)
2-SHV-71-565A	ISTC-1200(a)
2-SHV-71-602	ISTC-1200(a)
2-SHV-71-604	ISTC-1200(a)
2-SHV-71-606	ISTC-1200(a)
2-SHV-71-609	ISTC-1200(a)
2-SHV-71-615	ISTC-1200(a)
2-TV-71-616	ISTC-1200(a)

Flow Diagram: 2-47E814-1

VALVE ID	EXEMPTION BASIS
2-ISV-75-1	ISTC-1200(c)
2-FCV-75-2	ISTC-1200(c)
2-SHV-75-8	ISTC-1200(c)
2-BYV-75-10	ISTC-1200(a)
2-HCV-75-10	ISTC-1200(c)
2-SHV-75-10	ISTC-1200(a)
2-FCV-75-11	ISTC-1200(c)
2-SHV-75-17	ISTC-1200(c)
2-BYV-75-18	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-75-4	ISTC-1200(a)
2-SHV-75-5A	ISTC-1200(a)
2-SHV-75-5B	ISTC-1200(a)
2-SHV-75-5C	ISTC-1200(a)
2-RTV-75-7	ISTC-1200(a)
2-DRV-75-14A	ISTC-1200(a)
2-SHV-75-14B	ISTC-1200(a)
2-SHV-75-14C	ISTC-1200(a)
2-RTV-75-20	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-SHV-75-2A	ISTC-1200(a)
2-SHV-75-2B	ISTC-1200(a)
2-SHV-75-11A	ISTC-1200(a)
2-SHV-75-11B	ISTC-1200(a)
2-RTV-75-13	ISTC-1200(a)
2-SHV-75-14A	ISTC-1200(a)
2-RTV-75-16	ISTC-1200(a)
2-RTV-75-21H	ISTC-1200(a)
2-RTV-75-21L	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
2-HCV-75-18	ISTC-1200(c)
2-SHV-75-18	ISTC-1200(a)
2-SHV-75-25A	ISTC-1200(a)
2-HCV-75-27	ISTC-1200(c)
2-RTV-75-28	ISTC-1200(a)
2-ISV-75-29	ISTC-1200(c)
2-FCV-75-30	ISTC-1200(c)
2-SHV-75-36	ISTC-1200(c)
2-BYV-75-38	ISTC-1200(c)
2-HCV-75-38	ISTC-1200(c)
2-FCV-75-39	ISTC-1200(c)
2-RTV-75-41	ISTC-1200(a)
2-RTV-75-44	ISTC-1200(a)
2-SHV-75-45	ISTC-1200(c)
2-BYV-75-46	ISTC-1200(c)
2-HCV-75-46	ISTC-1200(c)
2-SHV-75-53A	ISTC-1200(a)
2-SHV-75-55	ISTC-1200(c)
2-RTV-75-56	ISTC-1200(a)
2-SHV-75-71	ISTC-1200(a)
2-SHV-75-72	ISTC-1200(a)
2-SHV-75-512A	ISTC-1200(a)
2-SHV-75-512B	ISTC-1200(a)
2-SHV-75-512C	ISTC-1200(a)
2-SHV-75-512D	ISTC-1200(a)
2-SHV-75-574A	ISTC-1200(a)
2-SHV-75-574B	ISTC-1200(a)
2-SHV-75-574C	ISTC-1200(a)
2-SHV-75-574D	ISTC-1200(a)
2-SHV-75-649	ISTC-1200(c)
2-SHV-75-650	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-75-24	ISTC-1200(a)
2-SHV-75-25B	ISTC-1200(a)
2-SHV-75-30A	ISTC-1200(a)
2-SHV-75-30B	ISTC-1200(a)
2-SHV-75-33A	ISTC-1200(a)
2-SHV-75-33B	ISTC-1200(a)
2-SHV-75-33C	ISTC-1200(a)
2-SHV-75-38	ISTC-1200(a)
2-SHV-75-39A	ISTC-1200(a)
2-SHV-75-39B	ISTC-1200(a)
2-SHV-75-42B	ISTC-1200(a)
2-SHV-75-42C	ISTC-1200(a)
2-RTV-75-48	ISTC-1200(a)
2-SHV-75-51A	ISTC-1200(a)
2-SHV-75-52	ISTC-1200(a)
2-SHV-75-53B	ISTC-1200(a)
2-SHV-75-510A	ISTC-1200(a)
2-SHV-75-510B	ISTC-1200(a)
2-SHV-75-510C	ISTC-1200(a)
2-SHV-75-510D	ISTC-1200(a)
2-SHV-75-518	ISTC-1200(a)
2-SHV-75-591	ISTC-1200(a)
2-SHV-75-593	ISTC-1200(a)
2-SHV-75-595	ISTC-1200(a)
2-SHV-75-597	ISTC-1200(a)
2-TV-75-625A	ISTC-1200(a)
2-TV-75-625B	ISTC-1200(a)
2-TV-75-627	ISTC-1200(a)
2-DRV-75-632	ISTC-1200(a)
2-DRV-75-633	ISTC-1200(a)
2-SHV-75-637	ISTC-1200(a)
2-SHV-75-639	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-SHV-75-23A	ISTC-1200(a)
2-SHV-75-23B	ISTC-1200(a)
2-SHV-75-24	ISTC-1200(a)
2-TV-75-26A	ISTC-1200(a)
2-SHV-75-26A	ISTC-1200(a)
2-SHV-75-26B	ISTC-1200(a)
2-TV-75-26B	ISTC-1200(a)
2-RTV-75-32	ISTC-1200(a)
2-RTV-75-35	ISTC-1200(a)
2-SHV-75-42A	ISTC-1200(a)
2-VTV-75-44	ISTC-1200(a)
2-SHV-75-46	ISTC-1200(a)
2-RTV-75-49H	ISTC-1200(a)
2-RTV-75-49L	ISTC-1200(a)
2-SHV-75-51B	ISTC-1200(a)
2-RTV-75-52	ISTC-1200(a)
2-TV-75-54A	ISTC-1200(a)
2-SHV-75-54A	ISTC-1200(a)
2-SHV-75-54B	ISTC-1200(a)
2-TV-75-54B	ISTC-1200(a)
2-SHV-75-83	ISTC-1200(c)
2-SHV-75-523A	ISTC-1200(a)
2-SHV-75-523B	ISTC-1200(a)
2-SHV-75-535	ISTC-1200(a)
2-SHV-75-584A	ISTC-1200(a)
2-SHV-75-584B	ISTC-1200(a)
2-TV-75-622	ISTC-1200(a)
2-SHV-75-624A	ISTC-1200(a)
2-SHV-75-624B	ISTC-1200(a)
2-SHV-75-626	ISTC-1200(a)
2-SHV-75-643	ISTC-1200(a)
2-SHV-75-645	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 2-47E815-4

VALVE ID	EXEMPTION BASIS
2-CKV-12-624	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-CKV-12-636	ISTA-1100

Flow Diagram: 2-47E817-1

VALVE ID	EXEMPTION BASIS
2-FCV-3-98	ISTC-1200(a)
2-FCV-3-99	ISTC-1200(a)
2-RTV-68-200A	ISTC-1200(c)
2-RTV-68-201A	ISTC-1200(c)
2-RTV-68-202A	ISTC-1200(c)
2-RTV-68-203A	ISTC-1200(c)
2-RTV-68-204A	ISTC-1200(c)
2-RTV-68-213A	ISTC-1200(c)
2-RTV-68-214A	ISTC-1200(c)
2-RTV-68-215A	ISTC-1200(c)
2-RTV-68-216A	ISTC-1200(c)
2-RTV-68-217A	ISTC-1200(c)
2-RTV-68-218A	ISTC-1200(c)
2-RTV-68-219A	ISTC-1200(c)
2-RTV-68-220A	ISTC-1200(c)
2-RTV-68-221A	ISTC-1200(c)
2-RTV-68-223A	ISTC-1200(c)
2-DRV-10-505	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-RTV-68-224A	ISTC-1200(c)
2-RTV-68-225A	ISTC-1200(c)
2-RTV-68-226A	ISTC-1200(c)
2-RTV-68-264	ISTC-1200(c)
2-RTV-68-265	ISTC-1200(c)
2-RTV-68-266	ISTC-1200(c)
2-RTV-68-267	ISTC-1200(c)
2-RTV-68-268	ISTC-1200(c)
2-RTV-68-269	ISTC-1200(c)
2-RTV-68-270	ISTC-1200(c)
2-RTV-68-271	ISTC-1200(c)
2-RTV-68-272	ISTC-1200(c)
2-RTV-68-273	ISTC-1200(c)
2-RTV-68-274	ISTC-1200(c)
2-RTV-68-275	ISTC-1200(c)
2-RTV-68-276	ISTC-1200(c)
2-RTV-68-277	ISTC-1200(c)
2-RTV-68-278	ISTC-1200(c)
2-RTV-68-279	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-FCV-68-1	ISTA-1100
2-FCV-68-33	ISTC-1200(c)
2-FCV-68-35	ISTC-1200(c)
2-FCV-68-77	ISTA-1100
2-RTV-68-222A	ISTC-1200(c)
2-VTV-68-237	ISTC-1200(a)
2-RTV-68-280	ISTC-1200(c)
2-RTV-68-281	ISTC-1200(c)
2-RTV-68-282	ISTC-1200(c)
2-RTV-68-283	ISTC-1200(c)
2-RTV-68-284	ISTC-1200(c)
2-RTV-68-285	ISTC-1200(c)
2-RTV-68-286	ISTC-1200(c)
2-RTV-68-287	ISTC-1200(c)
2-VTV-10-500	ISTC-1200(a)
2-VTV-10-501	ISTC-1200(a)
2-VTV-10-502	ISTA-1100
2-SHV-68-507	ISTC-1200(c)
2-SHV-68-522	ISTA-1100

Flow Diagram: 2-47E820-2

VALVE ID	EXEMPTION BASIS
2-FCV-85-39A (185 Typical)	ISTC-1200skid
2-CKV-85-597 (185 Typical)	ISTC-1200skid
2-CKV-85-616 (185 Typical)	ISTC-1200skid

VALVE ID	EXEMPTION BASIS
2-FCV-85-39B (185 Typical)	ISTC-1200skid
2-FCV-85-40A (185 Typical)	ISTC-1200skid
2-FCV-85-40B (185 Typical)	ISTC-1200skid
2-FCV-85-40C (185 Typical)	ISTC-1200skid

VALVE ID	EXEMPTION BASIS
2-FCV-85-40D (185 Typical)	ISTC-1200skid
2-ISV-85-612 (185 Typical)	ISTC-1200(c)
2-ISV-85-615 (185 Typical)	ISTC-1200(c)
2-SHV-85-617 (185 Typical)	ISTC-1200(c)

Flow Diagram: 2-47E822-1

VALVE ID	EXEMPTION BASIS
2-DRV-70-507	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-DRV-70-559	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 2-47E844-2

VALVE ID	EXEMPTION BASIS
2-CKV-24-707	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-CKV-24-730	ISTA-1100

Flow Diagram: 2-47E854-1

VALVE ID	EXEMPTION BASIS
2-ISV-63-12	ISTC-1200(c)
2-DRV-63-13	ISTC-1200(a)
2-SHV-63-14	ISTC-1200(a)
2-DRV-63-522	ISTC-1200(a)
2-ISV-63-524	ISTC-1200(c)
2-DRV-63-537	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-SHV-63-500	ISTC-1200(a)
2-SHV-63-506	ISTC-1200(c)
2-SHV-63-507	ISTC-1200(c)
2-SHV-63-515	ISTC-1200(c)
2-SHV-63-517	ISTC-1200(c)
2-THV-63-518	ISTC-1200(a)
2-SHV-63-539	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-RTV-63-7	ISTC-1200(a)
2-VTV-63-7	ISTC-1200(a)
2-RTV-63-11H	ISTC-1200(a)
2-RTV-63-11L	ISTC-1200(a)
2-SHV-63-528	ISTC-1200(a)
2-SHV-63-538	ISTC-1200(a)
2-SHV-63-540	ISTC-1200(a)

Flow Diagram: 2-47E855-1

VALVE ID	EXEMPTION BASIS
2-FCV-78-62	ISTA-1100
2-SHV-78-524	ISTA-1100
2-CKV-78-526	ISTA-1100
2-CKV-78-545	ISTA-1100
2-CKV-78-546	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-DRV-78-553	ISTA-1100
2-DRV-78-555	ISTA-1100
2-DRV-78-557	ISTA-1100
2-DRV-78-559	ISTA-1100
2-DRV-78-560	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-FCV-78-68	ISTA-1100
2-RTV-78-225A	ISTC-1200(a)
2-DRV-78-529	ISTC-1200(a)
2-VTV-78-581	ISTC-1200(a)
2-VTV-78-582	ISTC-1200(a)

Flow Diagram: 2-47E858-1

VALVE ID	EXEMPTION BASIS
2-SHV-23-31	ISTC-1200(c)
2-SHV-23-37	ISTC-1200(c)
2-SHV-23-43	ISTC-1200(c)
2-SHV-23-49	ISTC-1200(c)
2-RTV-23-222A	ISTC-1200(a)
2-DRV-23-511	ISTC-1200(a)
2-DRV-23-515	ISTC-1200(a)
2-SMV-23-583	ISTC-1200(c)
2-SMV-23-584	ISTC-1200(c)
2-SMV-23-585	ISTC-1200(c)
2-SMV-23-586	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-RTV-23-218A	ISTC-1200(a)
2-RTV-23-219A	ISTC-1200(a)
2-RTV-23-220A	ISTC-1200(a)
2-RTV-23-223A	ISTC-1200(a)
2-VTV-23-537	ISTC-1200(a)
2-DRV-23-551	ISTC-1200(a)
2-DRV-23-554	ISTC-1200(a)
2-DRV-23-570	ISTC-1200(a)
2-DRV-23-573	ISTC-1200(a)
2-VTV-23-576	ISTC-1200(a)
2-SMV-23-5109	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-RTV-23-217A	ISTC-1200(a)
2-RTV-23-221A	ISTC-1200(a)
2-RTV-23-224A	ISTC-1200(a)
2-VTV-23-517	ISTC-1200(a)
2-VTV-23-518	ISTC-1200(a)
2-DRV-23-531	ISTC-1200(a)
2-DRV-23-535	ISTC-1200(a)
2-VTV-23-538	ISTC-1200(a)
2-VTV-23-556	ISTC-1200(a)
2-VTV-23-557	ISTC-1200(a)
2-VTV-23-575	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 2-47E859-1

VALVE ID	EXEMPTION BASIS
2-SHV-67-550	ISTC-1200(c)
2-THV-67-551	ISTC-1200(b)
2-SHV-67-553	ISTC-1200(c)
2-SHV-67-560	ISTC-1200(c)
2-SHV-67-561	ISTC-1200(b)
2-SHV-67-562	ISTC-1200(c)
2-THV-67-565	ISTC-1200(b)
2-SHV-67-566	ISTC-1200(c)
2-SHV-67-567	ISTC-1200(c)
2-SHV-67-569	ISTC-1200(c)
2-SHV-67-570	ISTC-1200(c)
2-SHV-67-571	ISTC-1200(c)
2-SHV-67-572	ISTC-1200(b)
2-SHV-67-574	ISTC-1200(c)
2-SHV-67-593	ISTC-1200(c)
2-SHV-67-596	ISTC-1200(c)
2-SHV-67-602	ISTC-1200(c)
2-SHV-67-605	ISTC-1200(c)
2-SHV-67-607	ISTC-1200(c)
2-SHV-67-609	ISTC-1200(c)
2-SHV-67-610	ISTC-1200(c)
2-SHV-67-611	ISTC-1200(c)
2-SHV-67-613	ISTC-1200(c)
2-SHV-67-616	ISTC-1200(c)
2-SHV-67-878	ISTC-1200(c)
2-SHV-67-879	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
2-VTV-67-546	ISTC-1200(a)
2-DRV-67-552	ISTC-1200(a)
2-VTV-67-564	ISTC-1200(a)
2-DRV-67-573	ISTC-1200(a)
2-THV-67-594	ISTC-1200(b)
2-DRV-67-595	ISTC-1200(a)
2-THV-67-603	ISTC-1200(b)
2-THV-67-606	ISTC-1200(b)
2-THV-67-614	ISTC-1200(b)
2-DRV-67-615	ISTC-1200(a)
2-SHV-67-661	ISTC-1200(c)
2-FLV-67-820	ISTC-1200(a)
2-FLV-67-825	ISTC-1200(a)
2-FLV-67-826	ISTC-1200(a)
2-FLV-67-827	ISTC-1200(a)
2-FLV-67-828	ISTC-1200(a)
2-FLV-67-829	ISTC-1200(a)
2-DRV-67-996	ISTC-1200(a)
2-DRV-67-998	ISTC-1200(a)
2-DRV-67-1000	ISTC-1200(a)
2-VTV-67-1001	ISTC-1200(a)
2-VTV-67-1002	ISTC-1200(a)
2-VTV-67-1004	ISTC-1200(a)
2-VTV-67-1006	ISTC-1200(a)
2-RTV-67-6018	ISTC-1200(a)
2-RTV-67-6019	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-DRV-67-563	ISTC-1200(a)
2-DRV-67-568	ISTC-1200(a)
2-VTV-67-589	ISTC-1200(a)
2-DRV-67-604	ISTC-1200(a)
2-DRV-67-608	ISTC-1200(a)
2-VTV-67-612	ISTC-1200(a)
2-DRV-67-662	ISTC-1200(a)
2-VTV-67-746	ISTC-1200(a)
2-VTV-67-750	ISTC-1200(a)
2-VTV-67-752	ISTC-1200(a)
2-VTV-67-754	ISTC-1200(a)
2-VTV-67-755	ISTC-1200(a)
2-FLV-67-815	ISTC-1200(a)
2-FLV-67-816	ISTC-1200(a)
2-FLV-67-817	ISTC-1200(a)
2-FLV-67-818	ISTC-1200(a)
2-FLV-67-819	ISTC-1200(a)
2-FLV-67-830	ISTC-1200(a)
2-VTV-67-995	ISTC-1200(a)
2-VTV-67-997	ISTC-1200(a)
2-DRV-67-1003	ISTC-1200(a)
2-DRV-67-1005	ISTC-1200(a)
2-DRV-67-1007	ISTC-1200(a)
2-DRV-67-6025	ISTC-1200(a)
2-RTV-67-6026	ISTC-1200(a)
2-DRV-67-6027	ISTC-1200(a)

Flow Diagram: 2-47E860-1

VALVE ID	EXEMPTION BASIS
2-RTV-43-186	ISTA-1100

VALVE ID	EXEMPTION BASIS
2-SHV-43-182	ISTA-1100

Flow Diagram: 2-47E867-3

VALVE ID	EXEMPTION BASIS
2-TV-43-165	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-TV-43-176	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
2-TV-43-2378	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E610-43-1

VALVE ID	EXEMPTION BASIS
3-ISV-43-599	ISTA-1100

Flow Diagram: 3-47E610-43-6

VALVE ID	EXEMPTION BASIS
3-ISV-43-607	ISTA-1100
3-ISV-43-608	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-ISV-43-609	ISTA-1100
3-ISV-43-610	ISTA-1100
3-ISV-43-626	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-ISV-43-627	ISTA-1100
3-ISV-43-628	ISTA-1100
3-ISV-43-629	ISTA-1100

Flow Diagram: 3-47E801-1

VALVE ID	EXEMPTION BASIS
3-RTV-1-249A	ISTC-1200(a)
3-RTV-1-250A	ISTC-1200(a)
3-RTV-1-251A	ISTC-1200(a)
3-RTV-1-252A	ISTC-1200(a)
3-RTV-1-253A	ISTC-1200(a)
3-RTV-1-254A	ISTC-1200(a)
3-RTV-1-255A	ISTC-1200(a)
3-RTV-1-256A	ISTC-1200(a)
3-SMV-1-507	ISTA-1100
3-BOV-1-525	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-RTV-1-215A	ISTC-1200(a)
3-TV-1-503	ISTC-1200(a)
3-TV-1-505	ISTC-1200(a)
3-SMV-1-515	ISTA-1100
3-DRV-1-521	ISTC-1200(a)
3-DRV-1-527	ISTC-1200(a)
3-TV-1-532	ISTC-1200(a)
3-SMV-1-534	ISTA-1100
3-TV-1-540	ISTC-1200(a)
3-SMV-1-542	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-RTV-1-216A	ISTC-1200(a)
3-RTV-1-506	ISTC-1200(a)
3-TV-1-513	ISTC-1200(a)
3-TV-1-518	ISTC-1200(a)
3-SHV-1-735	ISTC-1200(a)
3-SHV-1-736	ISTC-1200(a)
3-VTV-1-738	ISTC-1200(a)
3-VTV-1-739	ISTC-1200(a)
3-SHV-1-9222	ISTC-1200(a)
3-TV-1-9223	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E801-2

VALVE ID	EXEMPTION BASIS
3-FCV-6-113	ISTA-1100
3-FCV-6-114	ISTA-1100
3-FCV-1-125	ISTA-1100
3-FCV-1-133	ISTA-1100
3-FCV-1-141	ISTA-1100
3-FCV-1-155	ISTA-1100
3-FCV-1-156	ISTA-1100
3-FCV-1-172	ISTA-1100
3-FCV-1-173	ISTA-1100
3-FCV-1-176A	ISTA-1100
3-FCV-1-176B	ISTA-1100
3-CKV-1-606	ISTA-1100
3-CKV-1-609	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-FCV-1-178A	ISTC-1200(a)
3-FCV-1-178B	ISTA-1100
3-RTV-6-289A	ISTC-1200(a)
3-DRV-1-590	ISTC-1200(a)
3-DRV-1-595	ISTC-1200(a)
3-SHV-1-604	ISTA-1100
3-SHV-1-605	ISTA-1100
3-SHV-1-607	ISTA-1100
3-SHV-1-608	ISTA-1100
3-DRV-1-710	ISTA-1100
3-DRV-1-711	ISTA-1100
3-SHV-1-741	ISTA-1100
3-SHV-1-743	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-RTV-1-217A	ISTC-1200(a)
3-RTV-1-218A	ISTC-1200(a)
3-RTV-1-219A	ISTC-1200(a)
3-RTV-1-220A	ISTC-1200(a)
3-RTV-1-221A	ISTC-1200(a)
3-RTV-1-239A	ISTC-1200(a)
3-RTV-1-241A	ISTC-1200(a)
3-RTV-1-243A	ISTC-1200(a)
3-RTV-6-290A	ISTC-1200(a)
3-RTV-6-291A	ISTC-1200(a)
3-RTV-6-292A	ISTC-1200(a)
3-DRV-1-600	ISTC-1200(a)
3-ISV-1-607	ISTA-1100

Flow Diagram: 3-47E803-1

VALVE ID	EXEMPTION BASIS
3-ISV-3-66	ISTC-1200(c)
3-ISV-3-67	ISTC-1200(c)
3-VTV-3-561	ISTC-1200(a)
3-VTV-3-562	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-DRV-3-555	ISTC-1200(a)
3-DRV-3-559	ISTC-1200(a)
3-DRV-3-573	ISTC-1200(a)
3-DRV-3-574	ISTC-1200(a)
3-TV-73-628	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-DRV-3-560	ISTC-1200(a)
3-DRV-3-569	ISTC-1200(a)
3-VTV-3-575	ISTC-1200(a)
3-VTV-3-576	ISTC-1200(a)
3-TV-73-626	ISTC-1200(a)

Flow Diagram: 3-47E803-5

VALVE ID	EXEMPTION BASIS
3-RTV-3-226A	ISTC-1200(c)
3-RTV-3-227A	ISTC-1200(c)
3-RTV-3-228A	ISTC-1200(c)
3-RTV-3-229A	ISTC-1200(c)
3-RTV-3-231A	ISTC-1200(c)
3-RTV-3-233A	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-RTV-3-234A	ISTC-1200(c)
3-RTV-3-235A	ISTC-1200(c)
3-RTV-3-236A	ISTC-1200(c)
3-RTV-3-237A	ISTC-1200(c)
3-RTV-3-240A	ISTC-1200(c)
3-SHV-3-850	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-SHV-3-852	ISTC-1200(c)
3-SHV-3-854	ISTC-1200(c)
3-SHV-3-856	ISTC-1200(c)
3-VTV-3-8002	ISTC-1200(a)
3-VTV-3-8003	ISTC-1200(a)
3-VTV-3-8004	ISTC-1200(a)
3-VTV-3-8005	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E805-3

VALVE ID	EXEMPTION BASIS
3-SHV-6-823	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-SHV-6-827	ISTA-1100

Flow Diagram: 3-47E807-2

VALVE ID	EXEMPTION BASIS
3-DRV-8-514	ISTA-1100
3-DRV-8-515	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-DRV-8-533	ISTA-1100
3-DRV-8-534	ISTA-1100
3-DRV-8-554	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-FCV-1-146	ISTA-1100
3-DRV-8-553	ISTA-1100
3-SHV-8-575	ISTA-1100

Flow Diagram: 3-47E810-1

VALVE ID	EXEMPTION BASIS
3-ISV-69-500	ISTA-1100
3-TV-69-503	ISTC-1200(a)
3-SHV-69-551	ISTC-1200(a)
3-SHV-69-552	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-TV-69-583	ISTC-1200(a)
3-TV-69-584	ISTC-1200(a)
3-TV-69-633	ISTC-1200(a)
3-TV-69-634	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-VTV-85-810A	ISTC-1200(a)
3-VTV-85-810B	ISTC-1200(a)
3-VTV-85-810C	ISTC-1200(a)
3-VTV-85-810D	ISTC-1200(a)

Flow Diagram: 3-47E811-1

VALVE ID	EXEMPTION BASIS
3-SHV-74-10	ISTC-1200(c)
3-SHV-74-22	ISTC-1200(c)
3-SHV-74-33	ISTC-1200(c)
3-SHV-74-44	ISTC-1200(c)
3-SHV-74-49	ISTC-1200(c)
3-SHV-74-55	ISTC-1200(c)
3-SHV-74-69	ISTC-1200(c)
3-SHV-74-86	ISTC-1200(c)
3-SHV-74-87	ISTC-1200(c)
3-ISV-74-88	ISTC-1200(c)
3-SHV-74-89	ISTC-1200(c)
3-SHV-74-90	ISTC-1200(c)
3-RTV-43-158	ISTA-1100
3-RTV-74-205A	ISTC-1200(a)
3-RTV-74-217A	ISTC-1200(a)
3-DRV-74-525A	ISTC-1200(a)
3-DRV-74-525B	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-RTV-74-201A	ISTC-1200(a)
3-RTV-74-202A	ISTC-1200(a)
3-RTV-74-206A	ISTC-1200(a)
3-RTV-74-207A	ISTC-1200(a)
3-RTV-74-209A	ISTC-1200(a)
3-RTV-74-210A	ISTC-1200(a)
3-RTV-74-211A	ISTC-1200(a)
3-RTV-74-213A	ISTC-1200(a)
3-RTV-74-215A	ISTC-1200(a)
3-RTV-74-219A	ISTC-1200(a)
3-RTV-74-225A	ISTC-1200(a)
3-VTV-74-512A	ISTC-1200(a)
3-VTV-74-512B	ISTC-1200(a)
3-VTV-74-512C	ISTC-1200(a)
3-VTV-74-512D	ISTC-1200(a)
3-VTV-74-546A	ISTC-1200(a)
3-VTV-74-546B	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-RTV-74-200A	ISTC-1200(a)
3-RTV-74-203A	ISTC-1200(a)
3-RTV-74-204A	ISTC-1200(a)
3-RTV-74-208A	ISTC-1200(a)
3-RTV-74-212A	ISTC-1200(a)
3-RTV-74-214A	ISTC-1200(a)
3-RTV-74-216A	ISTC-1200(a)
3-RTV-74-218A	ISTC-1200(a)
3-RTV-74-220A	ISTC-1200(a)
3-SHV-74-251A	ISTC-1200(c)
3-SHV-74-251B	ISTC-1200(c)
3-SHV-74-251C	ISTC-1200(c)
3-SHV-74-251D	ISTC-1200(c)
3-SHV-74-252A	ISTC-1200(c)
3-SHV-74-252B	ISTC-1200(c)
3-SHV-74-252C	ISTC-1200(c)
3-SHV-74-252D	ISTC-1200(c)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
3-DRV-74-525C	ISTC-1200(a)
3-DRV-74-525D	ISTC-1200(a)
3-SHV-74-532A	ISTC-1200(a)
3-SHV-74-532B	ISTC-1200(a)
3-SHV-74-532C	ISTC-1200(a)
3-SHV-74-532D	ISTC-1200(a)
3-DRV-74-568A	ISTC-1200(a)
3-DRV-74-568B	ISTC-1200(a)
3-DRV-74-568C	ISTC-1200(a)
3-DRV-74-568D	ISTC-1200(a)
3-DRV-74-570A	ISTC-1200(a)
3-DRV-74-570B	ISTC-1200(a)
3-DRV-74-570C	ISTC-1200(a)
3-DRV-74-570D	ISTC-1200(a)
3-DRV-74-573B	ISTC-1200(a)
3-DRV-74-575A	ISTC-1200(a)
3-DRV-74-575B	ISTC-1200(a)
3-DRV-74-575C	ISTC-1200(a)
3-DRV-74-575D	ISTC-1200(a)
3-DRV-74-581A	ISTC-1200(a)
3-DRV-74-581B	ISTC-1200(a)
3-DRV-74-581C	ISTC-1200(a)
3-DRV-74-581D	ISTC-1200(a)
3-DRV-74-593A	ISTC-1200(a)
3-DRV-74-593B	ISTC-1200(a)
3-DRV-74-622	ISTC-1200(a)
3-DRV-74-624	ISTC-1200(a)
3-VTV-74-626A	ISTC-1200(a)
3-VTV-74-626B	ISTC-1200(a)
3-TV-74-629A	ISTC-1200(a)
3-SHV-74-660	ISTC-1200(c)
3-CKV-74-669	ISTA-1100
3-CKV-74-674	ISTA-1100
3-CKV-74-680A	ISTA-1100
3-CKV-74-680B	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-VTV-74-546C	ISTC-1200(a)
3-VTV-74-546D	ISTC-1200(a)
3-VTV-74-548A	ISTC-1200(a)
3-VTV-74-548B	ISTC-1200(a)
3-VTV-74-548C	ISTC-1200(a)
3-VTV-74-548D	ISTC-1200(a)
3-DRV-74-552A	ISTC-1200(a)
3-DRV-74-552B	ISTC-1200(a)
3-DRV-74-552C	ISTC-1200(a)
3-DRV-74-552D	ISTC-1200(a)
3-DRV-74-566A	ISTC-1200(a)
3-DRV-74-566B	ISTC-1200(a)
3-DRV-74-566C	ISTC-1200(a)
3-DRV-74-566D	ISTC-1200(a)
3-VTV-74-579A	ISTC-1200(a)
3-VTV-74-579B	ISTC-1200(a)
3-VTV-74-579C	ISTC-1200(a)
3-VTV-74-579D	ISTC-1200(a)
3-DRV-74-595A	ISTC-1200(a)
3-DRV-74-595B	ISTC-1200(a)
3-VTV-74-597A	ISTC-1200(a)
3-VTV-74-597B	ISTC-1200(a)
3-TV-74-629B	ISTC-1200(a)
3-TV-74-637A	ISTC-1200(a)
3-TV-74-637B	ISTC-1200(a)
3-VTV-74-650	ISTC-1200(a)
3-VTV-74-651	ISTC-1200(a)
3-VTV-74-654	ISTC-1200(a)
3-DRV-74-656	ISTC-1200(a)
3-TV-74-663	ISTC-1200(a)
3-TV-74-664	ISTC-1200(a)
3-TV-74-665	ISTC-1200(a)
3-VTV-74-683A	ISTC-1200(a)
3-VTV-74-683B	ISTC-1200(a)
3-VTV-74-707	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-TV-74-253A	ISTC-1200(a)
3-TV-74-253B	ISTC-1200(a)
3-TV-74-253C	ISTC-1200(a)
3-TV-74-253D	ISTC-1200(a)
3-TV-74-254A	ISTC-1200(a)
3-TV-74-254B	ISTC-1200(a)
3-TV-74-254C	ISTC-1200(a)
3-TV-74-254D	ISTC-1200(a)
3-DRV-74-504A	ISTC-1200(a)
3-DRV-74-504B	ISTC-1200(a)
3-DRV-74-504C	ISTC-1200(a)
3-DRV-74-504D	ISTC-1200(a)
3-VTV-74-506A	ISTC-1200(a)
3-VTV-74-506B	ISTC-1200(a)
3-VTV-74-506C	ISTC-1200(a)
3-VTV-74-506D	ISTC-1200(a)
3-VTV-74-514A	ISTC-1200(a)
3-VTV-74-514B	ISTC-1200(a)
3-VTV-74-514C	ISTC-1200(a)
3-VTV-74-514D	ISTC-1200(a)
3-VTV-74-584A	ISTC-1200(a)
3-VTV-74-584B	ISTC-1200(a)
3-VTV-74-584C	ISTC-1200(a)
3-VTV-74-584D	ISTC-1200(a)
3-DRV-74-588A	ISTC-1200(a)
3-DRV-74-588B	ISTC-1200(a)
3-VTV-74-590A	ISTC-1200(a)
3-VTV-74-590B	ISTC-1200(a)
3-VTV-74-606	ISTC-1200(a)
3-DRV-74-631A	ISTC-1200(a)
3-DRV-74-631B	ISTC-1200(a)
3-VTV-74-633A	ISTC-1200(a)
3-VTV-74-633B	ISTC-1200(a)
3-TV-74-636A	ISTC-1200(a)
3-TV-74-636B	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
3-CKV-74-698	ISTA-1100
3-CKV-74-728	ISTA-1100
3-SHV-74-729	ISTC-1200(a)
3-SHV-74-746	ISTC-1200(a)
3-SHV-74-747	ISTC-1200(a)
3-SHV-74-748A	ISTC-1200(a)
3-SHV-74-748B	ISTC-1200(a)
3-SHV-74-749A	ISTC-1200(a)
3-SHV-74-749B	ISTC-1200(a)
3-SHV-74-749C	ISTC-1200(a)
3-SHV-74-749D	ISTC-1200(a)
3-SHV-74-752	ISTC-1200(a)
3-SHV-74-754	ISTC-1200(c)
3-SHV-74-765A	ISTC-1200(a)
3-SHV-74-765B	ISTC-1200(a)
3-CKV-74-830	ISTA-1100
3-SHV-74-831	ISTC-1200(c)
3-SHV-74-832	ISTC-1200(c)
3-SHV-74-840	ISTC-1200(a)
3-SHV-74-842	ISTC-1200(a)
3-SHV-74-844	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-VTV-74-711A	ISTC-1200(a)
3-VTV-74-717B	ISTC-1200(a)
3-TV-74-724	ISTC-1200(a)
3-TV-74-726	ISTC-1200(a)
3-TV-74-755	ISTC-1200(a)
3-TV-74-756	ISTC-1200(a)
3-TV-74-761B	ISTC-1200(a)
3-VTV-74-775	ISTC-1200(a)
3-VTV-74-777	ISTC-1200(a)
3-SHV-74-793	ISTA-1100
3-TV-74-795B	ISTC-1200(a)
3-TV-74-796A	ISTC-1200(a)
3-TV-74-796B	ISTC-1200(a)
3-SHV-74-801	ISTA-1100
3-DRV-74-817	ISTC-1200(a)
3-SHV-74-848	ISTC-1200(a)
3-SHV-74-849	ISTC-1200(a)
3-SHV-74-850	ISTC-1200(a)
3-SHV-74-851	ISTC-1200(a)
3-SHV-74-852	ISTC-1200(a)
3-SHV-74-853	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-TV-74-638A	ISTC-1200(a)
3-TV-74-639A	ISTC-1200(a)
3-DRV-74-648	ISTC-1200(a)
3-DRV-74-649	ISTC-1200(a)
3-VTV-74-672	ISTC-1200(a)
3-VTV-74-678	ISTC-1200(a)
3-CKV-74-705	ISTA-1100
3-VTV-74-711B	ISTC-1200(a)
3-VTV-74-737	ISTC-1200(a)
3-VTV-74-738	ISTC-1200(a)
3-TV-74-761A	ISTC-1200(a)
3-TV-74-794A	ISTC-1200(a)
3-TV-74-794B	ISTC-1200(a)
3-TV-74-795A	ISTC-1200(a)
3-TV-74-798A	ISTC-1200(a)
3-TV-74-798B	ISTC-1200(a)
3-SHV-74-834	ISTC-1200(a)
3-SHV-74-836	ISTC-1200(a)
3-SHV-74-838	ISTC-1200(a)
3-TV-74-854A	ISTC-1200(a)
3-TV-74-908	ISTC-1200(a)
3-TV-74-909	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E812-1

VALVE ID	EXEMPTION BASIS
3-LCV-73-5	ISTA-1100
3-LCV-73-8	ISTA-1100
3-FCV-73-18	ISTC-1200skid
3-ISV-73-25	ISTC-1200(c)
3-PCV-73-43	ISTC-1200(b)
3-RTV-73-221A	ISTC-1200(a)
3-RTV-73-224A	ISTC-1200(a)
3-RTV-73-225A	ISTC-1200(a)
3-DRV-73-511	ISTC-1200(a)
3-DRV-73-518	ISTC-1200(a)
3-TV-73-529	ISTC-1200(a)
3-SHV-73-551	ISTC-1200(a)
3-SHV-73-552	ISTC-1200(a)
3-CKV-73-586	ISTA-1100
3-SHV-73-592	ISTC-1200(c)
3-SHV-73-593	ISTC-1200(c)
3-CKV-73-596	ISTA-1100
3-CKV-73-600	ISTC-1200skid
3-CKV-73-629	ISTA-1100
3-SHV-73-642	ISTC-1200(c)
3-TV-73-643	ISTC-1200(a)
3-ISV-73-652	ISTC-1200(c)
3-TV-73-653	ISTC-1200(a)
3-SHV-73-735	ISTC-1200(c)
3-SHV-73-736	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-RTV-73-201A	ISTC-1200(a)
3-RTV-73-202A	ISTC-1200(a)
3-RTV-73-206A	ISTC-1200(a)
3-RTV-73-207A	ISTC-1200(a)
3-RTV-73-209A	ISTC-1200(a)
3-RTV-73-210A	ISTC-1200(a)
3-RTV-73-211A	ISTC-1200(a)
3-RTV-73-213A	ISTC-1200(a)
3-TV-73-232	ISTC-1200(a)
3-VTV-73-503	ISTC-1200(a)
3-DRV-73-521	ISTC-1200(a)
3-VTV-73-523	ISTC-1200(a)
3-VTV-73-525	ISTC-1200(a)
3-DRV-73-527	ISTC-1200(a)
3-DRV-73-535	ISTC-1200(a)
3-VTV-73-542	ISTC-1200(a)
3-VTV-73-547	ISTC-1200(a)
3-TV-73-549	ISTC-1200(a)
3-TV-73-560	ISTC-1200(a)
3-TV-73-563	ISTC-1200(a)
3-DRV-73-570	ISTC-1200(a)
3-DRV-73-578	ISTC-1200(a)
3-VTV-73-616	ISTC-1200(a)
3-TV-73-628	ISTC-1200(a)
3-DRV-73-631	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-RTV-73-200A	ISTC-1200(a)
3-RTV-73-203A	ISTC-1200(a)
3-RTV-73-204A	ISTC-1200(a)
3-RTV-73-208A	ISTC-1200(a)
3-RTV-73-212A	ISTC-1200(a)
3-DRV-73-501	ISTC-1200(a)
3-DRV-73-507	ISTC-1200(a)
3-VTV-73-513	ISTC-1200(a)
3-TV-73-515	ISTC-1200(a)
3-DRV-73-530	ISTC-1200(a)
3-VTV-73-532	ISTC-1200(a)
3-DRV-73-537	ISTC-1200(a)
3-DRV-73-540	ISTC-1200(a)
3-DRV-73-545	ISTC-1200(a)
3-TV-73-555	ISTC-1200(a)
3-TV-73-557	ISTC-1200(a)
3-VTV-73-576	ISTC-1200(a)
3-SHV-73-584	ISTC-1200(a)
3-VTV-73-589	ISTC-1200(a)
3-DRV-73-605	ISTC-1200(a)
3-VTV-73-630	ISTC-1200(a)
3-TV-73-637	ISTC-1200(a)
3-TV-73-655	ISTC-1200(a)
3-TV-73-657	ISTC-1200(a)
3-SHV-73-740	ISTC-1200(a)
3-TV-73-741	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E813-1

VALVE ID	EXEMPTION BASIS
3-RTV-71-1AH	ISTC-1200(a)
3-RTV-71-1AL	ISTC-1200(a)
3-RTV-71-1BH	ISTC-1200(a)
3-RTV-71-1BL	ISTC-1200(a)
3-LCV-71-5	ISTA-1100
3-FCV-71-9	ISTC-1200skid
3-FCV-73-19	ISTC-1200skid
3-PCV-71-22	ISTC-1200(b)
3-SHV-71-520	ISTC-1200(c)
3-VTV-71-529	ISTC-1200(a)
3-VTV-71-530	ISTC-1200(a)
3-CKV-71-564	ISTA-1100
3-SHV-71-570	ISTC-1200(c)
3-SHV-71-571	ISTC-1200(c)
3-CKV-71-574	ISTA-1100
3-SHV-71-578	ISTC-1200(c)
3-SHV-71-579	ISTC-1200(c)
3-SHV-71-601	ISTC-1200(c)
3-SHV-71-612	ISTC-1200(c)
3-SHV-71-617	ISTC-1200(c)
3-SHV-71-618	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-RTV-71-4	ISTC-1200(a)
3-FCV-71-10	ISTC-1200skid
3-SHV-71-14	ISTC-1200(a)
3-SHV-71-16	ISTC-1200(c)
3-RTV-71-20	ISTC-1200(a)
3-RTV-71-21	ISTC-1200(a)
3-TV-71-26	ISTC-1200(a)
3-RTV-71-36H	ISTC-1200(a)
3-RTV-71-36L	ISTC-1200(a)
3-SHV-71-40A	ISTC-1200(a)
3-SHV-71-40B	ISTC-1200(a)
3-SHV-71-538	ISTC-1200(a)
3-TV-71-540	ISTC-1200(a)
3-TV-71-541	ISTC-1200(a)
3-SHV-71-544	ISTC-1200(a)
3-SHV-71-548	ISTC-1200(a)
3-SHV-71-551	ISTC-1200(a)
3-SHV-71-553	ISTC-1200(a)
3-TV-71-562	ISTC-1200(a)
3-SHV-71-565A	ISTC-1200(a)
3-SHV-71-593	ISTC-1200(a)
3-SHV-71-613	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-RTV-71-5H	ISTC-1200(a)
3-RTV-71-5L	ISTC-1200(a)
3-RTV-71-12	ISTC-1200(a)
3-RTV-71-13A	ISTC-1200(a)
3-RTV-71-13B	ISTC-1200(a)
3-TV-71-19	ISTC-1200(a)
3-SHV-71-19A	ISTC-1200(a)
3-SHV-71-19B	ISTC-1200(a)
3-SHV-71-19C	ISTC-1200(a)
3-SHV-71-19D	ISTC-1200(a)
3-RTV-71-35	ISTC-1200(a)
3-SHV-71-506	ISTC-1200(a)
3-SHV-71-521	ISTC-1200(a)
3-SHV-71-524	ISTC-1200(a)
3-SHV-71-527	ISTC-1200(a)
3-SHV-71-561	ISTC-1200(a)
3-SHV-71-581	ISTC-1200(a)
3-SHV-71-602	ISTC-1200(a)
3-SHV-71-604	ISTC-1200(a)
3-SHV-71-606	ISTC-1200(a)
3-SHV-71-615	ISTC-1200(a)
3-TV-71-616	ISTC-1200(a)

Flow Diagram: 3-47E814-1

VALVE ID	EXEMPTION BASIS
3-ISV-75-1	ISTC-1200(c)
3-FCV-75-2	ISTC-1200(c)
3-SHV-75-8	ISTC-1200(c)
3-BYV-75-10	ISTC-1200(c)
3-SHV-75-10A	ISTC-1200(c)
3-SHV-75-10B	ISTC-1200(a)
3-FCV-75-11	ISTC-1200(c)
3-SHV-75-17	ISTC-1200(c)
3-BYV-75-18	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-RTV-75-4	ISTC-1200(a)
3-SHV-75-5A	ISTC-1200(a)
3-SHV-75-5C	ISTC-1200(a)
3-RTV-75-7	ISTC-1200(a)
3-RTV-75-13	ISTC-1200(a)
3-SHV-75-14A	ISTC-1200(a)
3-SHV-75-14B	ISTC-1200(a)
3-SHV-75-14C	ISTC-1200(a)
3-RTV-75-20	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-SHV-75-2A	ISTC-1200(a)
3-SHV-75-2B	ISTC-1200(a)
3-SHV-75-5B	ISTC-1200(a)
3-SHV-75-11A	ISTC-1200(a)
3-SHV-75-11B	ISTC-1200(a)
3-RTV-75-16	ISTC-1200(a)
3-RTV-75-21H	ISTC-1200(a)
3-RTV-75-21L	ISTC-1200(a)
3-SHV-75-23A	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
3-SHV-75-18A	ISTC-1200(c)
3-SHV-75-18B	ISTC-1200(a)
3-SHV-75-27	ISTC-1200(c)
3-RTV-75-28	ISTC-1200(a)
3-ISV-75-29	ISTC-1200(c)
3-FCV-75-30	ISTC-1200(c)
3-SHV-75-36	ISTC-1200(c)
3-BYV-75-38	ISTC-1200(c)
3-SHV-75-38A	ISTC-1200(c)
3-FCV-75-39	ISTC-1200(c)
3-RTV-75-41	ISTC-1200(a)
3-RTV-75-44	ISTC-1200(a)
3-SHV-75-45	ISTC-1200(c)
3-BYV-75-46	ISTC-1200(c)
3-SHV-75-46A	ISTC-1200(c)
3-RTV-75-48	ISTC-1200(a)
3-SHV-75-55	ISTC-1200(c)
3-RTV-75-56	ISTC-1200(a)
3-SHV-75-71	ISTC-1200(a)
3-SHV-75-72	ISTC-1200(a)
3-SHV-75-512A	ISTC-1200(a)
3-SHV-75-512B	ISTC-1200(a)
3-SHV-75-512C	ISTC-1200(a)
3-SHV-75-512D	ISTC-1200(a)
3-SHV-75-574A	ISTC-1200(a)
3-SHV-75-574B	ISTC-1200(a)
3-SHV-75-574C	ISTC-1200(a)
3-SHV-75-574D	ISTC-1200(a)
3-SHV-75-649	ISTC-1200(c)
3-SHV-75-650	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-RTV-75-24	ISTC-1200(a)
3-SHV-75-24	ISTC-1200(a)
3-SHV-75-25A	ISTC-1200(a)
3-SHV-75-26A	ISTC-1200(a)
3-SHV-75-26B	ISTC-1200(a)
3-SHV-75-30A	ISTC-1200(a)
3-SHV-75-30B	ISTC-1200(a)
3-SHV-75-38B	ISTC-1200(a)
3-SHV-75-46B	ISTC-1200(a)
3-SHV-75-51A	ISTC-1200(a)
3-SHV-75-51B	ISTC-1200(a)
3-SHV-75-52	ISTC-1200(a)
3-RTV-75-52	ISTC-1200(a)
3-SHV-75-53A	ISTC-1200(a)
3-SHV-75-510A	ISTC-1200(a)
3-SHV-75-510B	ISTC-1200(a)
3-SHV-75-510C	ISTC-1200(a)
3-SHV-75-510D	ISTC-1200(a)
3-SHV-75-518	ISTC-1200(a)
3-SHV-75-591	ISTC-1200(a)
3-SHV-75-593	ISTC-1200(a)
3-SHV-75-595	ISTC-1200(a)
3-SHV-75-597	ISTC-1200(a)
3-SHV-75-624A	ISTC-1200(a)
3-SHV-75-624B	ISTC-1200(a)
3-TV-75-625A	ISTC-1200(a)
3-TV-75-625B	ISTC-1200(a)
3-SHV-75-626	ISTC-1200(a)
3-TV-75-627	ISTC-1200(a)
3-SHV-75-637	ISTC-1200(a)
3-SHV-75-639	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-SHV-75-23B	ISTC-1200(a)
3-SHV-75-25B	ISTC-1200(a)
3-TV-75-26A	ISTC-1200(a)
3-TV-75-26B	ISTC-1200(a)
3-SHV-75-27A	ISTC-1200(c)
3-RTV-75-32	ISTC-1200(a)
3-SHV-75-33A	ISTC-1200(a)
3-SHV-75-33B	ISTC-1200(a)
3-SHV-75-33C	ISTC-1200(a)
3-RTV-75-35	ISTC-1200(a)
3-SHV-75-39A	ISTC-1200(a)
3-SHV-75-39B	ISTC-1200(a)
3-SHV-75-42A	ISTC-1200(a)
3-SHV-75-42B	ISTC-1200(a)
3-SHV-75-42C	ISTC-1200(a)
3-RTV-75-49H	ISTC-1200(a)
3-RTV-75-49L	ISTC-1200(a)
3-SHV-75-53B	ISTC-1200(a)
3-TV-75-54A	ISTC-1200(a)
3-SHV-75-54A	ISTC-1200(a)
3-SHV-75-54B	ISTC-1200(a)
3-TV-75-54B	ISTC-1200(a)
3-SHV-75-55A	ISTC-1200(a)
3-SHV-75-83	ISTC-1200(c)
3-SHV-75-523A	ISTC-1200(a)
3-SHV-75-523B	ISTC-1200(a)
3-SHV-75-535	ISTC-1200(a)
3-SHV-75-584A	ISTC-1200(a)
3-SHV-75-584B	ISTC-1200(a)
3-SHV-75-643	ISTC-1200(a)
3-SHV-75-645	ISTC-1200(a)

Flow Diagram: 3-47E815-5

VALVE ID	EXEMPTION BASIS
3-CKV-12-624	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-CKV-12-636	ISTA-1100

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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Flow Diagram: 3-47E817-1

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

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VALVE ID	EXEMPTION BASIS
3-FCV-3-98	ISTC-1200(a)
3-FCV-3-99	ISTC-1200(a)
3-FCV-3-188A	ISTA-1100
3-RTV-68-200A	ISTC-1200(c)
3-RTV-68-201A	ISTC-1200(c)
3-RTV-68-202A	ISTC-1200(c)
3-RTV-68-203A	ISTC-1200(c)
3-RTV-68-204A	ISTC-1200(c)
3-RTV-68-213A	ISTC-1200(c)
3-RTV-68-214A	ISTC-1200(c)
3-RTV-68-216A	ISTC-1200(c)
3-RTV-68-217A	ISTC-1200(c)
3-RTV-68-218A	ISTC-1200(c)
3-RTV-68-219A	ISTC-1200(c)
3-RTV-68-220A	ISTC-1200(c)
3-RTV-68-221A	ISTC-1200(c)
3-RTV-68-223A	ISTC-1200(c)
3-RTV-68-224A	ISTC-1200(c)
3-RTV-68-225A	ISTC-1200(c)
3-RTV-68-226A	ISTC-1200(c)
3-RTV-68-264	ISTC-1200(c)
3-RTV-68-265	ISTC-1200(c)
3-RTV-68-266	ISTC-1200(c)
3-RTV-68-267	ISTC-1200(c)
3-RTV-68-268	ISTC-1200(c)
3-RTV-68-269	ISTC-1200(c)
3-RTV-68-270	ISTC-1200(c)
3-RTV-68-271	ISTC-1200(c)
3-RTV-68-272	ISTC-1200(c)
3-RTV-68-273	ISTC-1200(c)
3-RTV-68-274	ISTC-1200(c)
3-RTV-68-275	ISTC-1200(c)
3-DRV-10-505	ISTA-1100
3-DRV-10-605	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-FCV-68-1	ISTA-1100
3-FCV-68-77	ISTA-1100
3-FCV-3-188B	ISTA-1100
3-VTV-68-240	ISTC-1200(a)
3-VTV-68-241	ISTC-1200(a)
3-VTV-68-242	ISTC-1200(a)
3-VTV-68-243	ISTC-1200(a)
3-VTV-68-244	ISTC-1200(a)
3-VTV-68-245	ISTC-1200(a)
3-VTV-68-246	ISTC-1200(a)
3-VTV-68-247	ISTC-1200(a)
3-VTV-68-248	ISTC-1200(a)
3-VTV-68-249	ISTC-1200(a)
3-RTV-68-276	ISTC-1200(c)
3-RTV-68-277	ISTC-1200(c)
3-RTV-68-278	ISTC-1200(c)
3-RTV-68-279	ISTC-1200(c)
3-RTV-68-280	ISTC-1200(c)
3-RTV-68-281	ISTC-1200(c)
3-RTV-68-282	ISTC-1200(c)
3-RTV-68-283	ISTC-1200(c)
3-RTV-68-284	ISTC-1200(c)
3-RTV-68-285	ISTC-1200(c)
3-RTV-68-286	ISTC-1200(c)
3-RTV-68-287	ISTC-1200(c)
3-VTV-10-500	ISTC-1200(a)
3-VTV-10-501	ISTC-1200(a)
3-VTV-10-502	ISTA-1100
3-SHV-68-507	ISTC-1200(c)
3-DRV-68-520	ISTC-1200(a)
3-DRV-68-521	ISTC-1200(a)
3-SHV-68-522	ISTA-1100
3-TV-68-561	ISTC-1200(a)
3-TV-68-565	ISTC-1200(a)
3-TV-68-567	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-VTV-68-227	ISTC-1200(a)
3-VTV-68-228	ISTC-1200(a)
3-VTV-68-229	ISTC-1200(a)
3-VTV-68-230	ISTC-1200(a)
3-VTV-68-231	ISTC-1200(a)
3-VTV-68-232	ISTC-1200(a)
3-VTV-68-233	ISTC-1200(a)
3-VTV-68-234	ISTC-1200(a)
3-VTV-68-235	ISTC-1200(a)
3-VTV-68-236	ISTC-1200(a)
3-VTV-68-237	ISTC-1200(a)
3-VTV-68-238	ISTC-1200(a)
3-VTV-68-239	ISTC-1200(a)
3-VTV-68-250	ISTC-1200(a)
3-VTV-68-251	ISTC-1200(a)
3-VTV-68-252	ISTC-1200(a)
3-VTV-68-253	ISTC-1200(a)
1-VTV-68-254	ISTC-1200(a)
3-VTV-68-255	ISTC-1200(a)
3-VTV-68-256	ISTC-1200(a)
3-VTV-68-296	ISTC-1200(a)
3-VTV-68-297	ISTC-1200(a)
3-DRV-68-505	ISTC-1200(a)
3-DRV-68-506	ISTC-1200(a)
3-TV-68-560	ISTC-1200(a)
3-TV-68-562	ISTC-1200(a)
3-TV-68-563	ISTC-1200(a)
3-TV-68-564	ISTC-1200(a)
3-TV-68-566	ISTC-1200(a)
3-VTV-68-6601	ISTC-1200(a)
3-SHV-68-6602	ISTC-1200(a)
3-SHV-68-6603	ISTC-1200(a)
3-VTV-68-6604	ISTC-1200(a)
3-SHV-68-6605	ISTC-1200(a)
3-SHV-68-6606	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E820-2

VALVE ID	EXEMPTION BASIS
3-FCV-85-39A (185 Typical)	ISTC-1200skid
3-CKV-85-597 (185 Typical)	ISTC-1200skid
3-CKV-85-616 (185 Typical)	ISTC-1200skid

VALVE ID	EXEMPTION BASIS
3-FCV-85-39B (185 Typical)	ISTC-1200skid
3-FCV-85-40A (185 Typical)	ISTC-1200skid
3-FCV-85-40B (185 Typical)	ISTC-1200skid
3-FCV-85-40C (185 Typical)	ISTC-1200skid

VALVE ID	EXEMPTION BASIS
3-FCV-85-40D (185 Typical)	ISTC-1200skid
3-ISV-85-612 (185 Typical)	ISTC-1200(c)
3-ISV-85-615 (185 Typical)	ISTC-1200(c)
3-SHV-85-617 (185 Typical)	ISTC-1200(c)

Flow Diagram: 3-47E820-6

VALVE ID	EXEMPTION BASIS
3-RTV-85-273	ISTC-1200(a)
3-RTV-85-274	ISTC-1200(c)
3-RTV-85-275	ISTC-1200(a)
3-RTV-85-276	ISTC-1200(a)
3-RTV-85-277	ISTC-1200(a)
3-RTV-85-278	ISTC-1200(a)
3-RTV-85-279	ISTC-1200(a)
3-RTV-85-280	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-RTV-85-281	ISTC-1200(a)
3-RTV-85-282	ISTC-1200(a)
3-RTV-85-283	ISTC-1200(a)
3-RTV-85-284	ISTC-1200(a)
3-RTV-85-285	ISTC-1200(a)
3-RTV-85-286	ISTC-1200(a)
3-RTV-85-287	ISTC-1200(a)
3-RTV-85-288	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-SHV-85-45A3	ISTC-1200(a)
3-SHV-85-45B3	ISTC-1200(a)
3-SHV-85-45C3	ISTC-1200(a)
3-SHV-85-45D3	ISTC-1200(a)
3-SHV-85-45E3	ISTC-1200(a)
3-SHV-85-45F3	ISTC-1200(a)
3-SHV-85-45G3	ISTC-1200(a)
3-SHV-85-45H3	ISTC-1200(a)
3-SHV-85-664	ISTC-1200(c)

Flow Diagram: 3-47E822-1

VALVE ID	EXEMPTION BASIS
3-DRV-70-507	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-DRV-70-559	ISTC-1200(a)

Flow Diagram: 3-47E854-1

VALVE ID	EXEMPTION BASIS
3-ISV-63-12	ISTC-1200(c)
3-DRV-63-13	ISTC-1200(a)
3-SHV-63-14	ISTC-1200(a)
3-DRV-63-522	ISTC-1200(a)
3-ISV-63-524	ISTC-1200(c)
3-DRV-63-537	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-SHV-63-500	ISTC-1200(a)
3-SHV-63-506	ISTC-1200(c)
3-SHV-63-507	ISTC-1200(c)
3-SHV-63-515	ISTC-1200(c)
3-SHV-63-517	ISTC-1200(c)
3-THV-63-518	ISTC-1200(a)
3-SHV-63-538	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-RTV-63-7	ISTC-1200(a)
3-VTV-63-7	ISTC-1200(a)
3-RTV-63-11H	ISTC-1200(a)
3-RTV-63-11L	ISTC-1200(a)
3-SHV-63-528	ISTC-1200(a)
3-SHV-63-539	ISTC-1200(a)
3-SHV-63-540	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E855-1

VALVE ID	EXEMPTION BASIS
3-FCV-78-62	ISTA-1100
3-SHV-78-524	ISTA-1100
3-CKV-78-526	ISTA-1100
3-CKV-78-545	ISTA-1100
3-CKV-78-546	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-DRV-78-553	ISTA-1100
3-DRV-78-555	ISTA-1100
3-DRV-78-557	ISTA-1100
3-DRV-78-559	ISTA-1100
3-DRV-78-560	ISTA-1100

VALVE ID	EXEMPTION BASIS
3-FCV-78-68	ISTA-1100
3-RTV-78-225A	ISTC-1200(a)
3-DRV-78-529	ISTC-1200(a)
3-VTV-78-581	ISTC-1200(a)
3-VTV-78-582	ISTC-1200(a)

Flow Diagram: 3-47E858-1

VALVE ID	EXEMPTION BASIS
3-SHV-23-31	ISTC-1200(c)
3-SHV-23-37	ISTC-1200(c)
3-SHV-23-43	ISTC-1200(c)
3-SHV-23-49	ISTC-1200(c)
3-RTV-23-217A	ISTC-1200(a)
3-DRV-23-511	ISTC-1200(a)
3-DRV-23-515	ISTC-1200(a)
3-SMV-23-583	ISTC-1200(c)
3-SMV-23-584	ISTC-1200(c)
3-SMV-23-585	ISTC-1200(c)
3-SMV-23-586	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-RTV-23-218A	ISTC-1200(a)
3-RTV-23-221A	ISTC-1200(a)
3-RTV-23-223A	ISTC-1200(a)
3-DRV-23-531	ISTC-1200(a)
3-DRV-23-535	ISTC-1200(a)
3-VTV-23-538	ISTC-1200(a)
3-DRV-23-551	ISTC-1200(a)
3-DRV-23-554	ISTC-1200(a)
3-DRV-23-570	ISTC-1200(a)
3-DRV-23-573	ISTC-1200(a)
3-SMV-23-5109	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-RTV-23-219A	ISTC-1200(a)
3-RTV-23-220A	ISTC-1200(a)
3-RTV-23-222A	ISTC-1200(a)
3-RTV-23-224A	ISTC-1200(a)
3-VTV-23-517	ISTC-1200(a)
3-VTV-23-518	ISTC-1200(a)
3-VTV-23-537	ISTC-1200(a)
3-VTV-23-556	ISTC-1200(a)
3-VTV-23-557	ISTC-1200(a)
3-VTV-23-575	ISTC-1200(a)
3-VTV-23-576	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E859-1

VALVE ID	EXEMPTION BASIS
3-SHV-67-550	ISTC-1200(c)
3-SHV-67-551	ISTC-1200(b)
3-SHV-67-553	ISTC-1200(c)
3-SHV-67-560	ISTC-1200(c)
3-SHV-67-561	ISTC-1200(b)
3-SHV-67-562	ISTC-1200(c)
3-SHV-67-565	ISTC-1200(b)
3-SHV-67-566	ISTC-1200(c)
3-SHV-67-567	ISTC-1200(c)
3-SHV-67-569	ISTC-1200(c)
3-SHV-67-570	ISTC-1200(c)
3-SHV-67-571	ISTC-1200(c)
3-SHV-67-572	ISTC-1200(b)
3-SHV-67-574	ISTC-1200(c)
3-SHV-67-593	ISTC-1200(c)
3-SHV-67-594	ISTC-1200(b)
3-SHV-67-596	ISTC-1200(c)
3-SHV-67-602	ISTC-1200(c)
3-SHV-67-603	ISTC-1200(b)
3-SHV-67-5003	ISTC-1200(c)
3-SHV-67-5004	ISTC-1200(c)
3-SHV-67-5005	ISTC-1200(c)
3-SHV-67-5006	ISTC-1200(c)
3-SHV-67-5026	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-DRV-67-552	ISTC-1200(a)
3-VTV-67-564	ISTC-1200(a)
3-DRV-67-573	ISTC-1200(a)
3-SHV-67-605	ISTC-1200(c)
3-SHV-67-606	ISTC-1200(b)
3-SHV-67-607	ISTC-1200(c)
3-SHV-67-609	ISTC-1200(c)
3-SHV-67-610	ISTC-1200(c)
3-SHV-67-611	ISTC-1200(c)
3-SHV-67-613	ISTC-1200(c)
3-SHV-67-614	ISTC-1200(b)
3-SHV-67-616	ISTC-1200(c)
3-SHV-67-618	ISTC-1200(c)
3-VTV-67-811	ISTC-1200(a)
3-VTV-67-812	ISTC-1200(a)
3-VTV-67-813	ISTC-1200(a)
3-VTV-67-814	ISTC-1200(a)
3-SHV-67-820	ISTC-1200(a)
3-SHV-67-825	ISTC-1200(a)
3-SHV-67-826	ISTC-1200(a)
3-SHV-67-827	ISTC-1200(a)
3-SHV-67-828	ISTC-1200(a)
3-SHV-67-829	ISTC-1200(a)
3-FCV-67-5027	ISTC-1200(b)
3-FCV-67-5028	ISTC-1200(b)

VALVE ID	EXEMPTION BASIS
3-VTV-67-546	ISTC-1200(a)
3-DRV-67-563	ISTC-1200(a)
3-DRV-67-568	ISTC-1200(a)
3-VTV-67-589	ISTC-1200(a)
3-DRV-67-604	ISTC-1200(a)
3-DRV-67-608	ISTC-1200(a)
3-VTV-67-612	ISTC-1200(a)
3-DRV-67-615	ISTC-1200(a)
3-SHV-67-663	ISTC-1200(c)
3-VTV-67-745	ISTC-1200(a)
3-SHV-67-815	ISTC-1200(a)
3-SHV-67-816	ISTC-1200(a)
3-SHV-67-817	ISTC-1200(a)
3-SHV-67-818	ISTC-1200(a)
3-SHV-67-819	ISTC-1200(a)
3-VTV-67-821	ISTC-1200(a)
3-VTV-67-822	ISTC-1200(a)
3-VTV-67-823	ISTC-1200(a)
3-SHV-67-830	ISTC-1200(a)
3-VTV-67-5009	ISTC-1200(a)
3-DRV-67-5010	ISTC-1200(a)
3-DRV-67-5012	ISTC-1200(a)
3-VTV-67-5024	ISTC-1200(a)
3-RTV-67-6020	ISTC-1200(a)
3-RTV-67-6021	ISTC-1200(a)

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E859-2

VALVE ID	EXEMPTION BASIS
3-TCV-67-80	ISTC-1200(b)
3-TCV-67-81	ISTC-1200(b)
3-TCV-67-82	ISTC-1200(b)
3-SHV-67-691	ISTC-1200(c)
3-SHV-67-692	ISTC-1200(c)
3-SHV-67-699	ISTC-1200(c)
3-SHV-67-701	ISTC-1200(c)
3-SHV-67-702	ISTC-1200(c)
3-SHV-67-709	ISTC-1200(c)
3-SHV-67-711	ISTC-1200(c)
3-SHV-67-712	ISTC-1200(c)
3-SHV-67-719	ISTC-1200(c)
3-SHV-67-721	ISTC-1200(c)
3-SHV-67-722	ISTC-1200(c)
3-SHV-67-729	ISTC-1200(c)
3-SHV-67-733	ISTC-1200(c)
3-SHV-67-734	ISTC-1200(c)
3-SHV-67-739	ISTC-1200(c)
3-SHV-67-741	ISTC-1200(c)
3-SHV-67-782	ISTC-1200(c)
3-SHV-67-798	ISTC-1200(c)
3-SHV-67-801	ISTC-1200(c)
3-SHV-67-804	ISTC-1200(c)
3-THV-67-862	ISTC-1200(b)
3-THV-67-863	ISTC-1200(b)
3-THV-67-864	ISTC-1200(b)
3-THV-67-865	ISTC-1200(b)

VALVE ID	EXEMPTION BASIS
3-TCV-67-83	ISTC-1200(b)
3-TV-67-280A	ISTC-1200(a)
3-TV-67-281A	ISTC-1200(a)
3-TV-67-284A	ISTC-1200(a)
3-TV-67-285A	ISTC-1200(a)
3-TV-67-287A	ISTC-1200(a)
3-TV-67-288A	ISTC-1200(a)
3-TV-67-289A	ISTC-1200(a)
3-TV-67-291A	ISTC-1200(a)
3-TV-67-292A	ISTC-1200(a)
3-TV-67-293A	ISTC-1200(a)
3-RTV-67-299A	ISTC-1200(a)
3-RTV-67-300A	ISTC-1200(a)
3-RTV-67-301A	ISTC-1200(a)
3-RTV-67-301B	ISTC-1200(a)
3-RTV-67-304A	ISTC-1200(a)
3-RTV-67-304B	ISTC-1200(a)
3-VTV-67-697	ISTC-1200(a)
3-DRV-67-698	ISTC-1200(a)
3-VTV-67-707	ISTC-1200(a)
3-DRV-67-718	ISTC-1200(a)
3-VTV-67-727	ISTC-1200(a)
3-DRV-67-731	ISTC-1200(a)
3-DRV-67-732	ISTC-1200(a)
3-VTV-67-809	ISTC-1200(a)
3-VTV-67-810	ISTC-1200(a)
3-RTV-67-1009	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-TV-67-279A	ISTC-1200(a)
3-TV-67-282A	ISTC-1200(a)
3-TV-67-283A	ISTC-1200(a)
3-TV-67-286A	ISTC-1200(a)
3-TV-67-290A	ISTC-1200(a)
3-TV-67-294A	ISTC-1200(a)
3-RTV-67-302A	ISTC-1200(a)
3-RTV-67-302B	ISTC-1200(a)
3-RTV-67-303A	ISTC-1200(a)
3-RTV-67-303B	ISTC-1200(a)
3-DRV-67-708	ISTC-1200(a)
3-VTV-67-717	ISTC-1200(a)
3-DRV-67-728	ISTC-1200(a)
3-DRV-67-784	ISTC-1200(a)
3-DRV-67-800	ISTC-1200(a)
3-DRV-67-803	ISTC-1200(a)
3-DRV-67-806	ISTC-1200(a)
3-TV-67-6001	ISTC-1200(a)
3-TV-67-6002	ISTC-1200(a)
3-TV-67-6003	ISTC-1200(a)
3-TV-67-6004	ISTC-1200(a)
3-TV-67-6005	ISTC-1200(a)
3-TV-67-6006	ISTC-1200(a)
3-TV-67-6007	ISTC-1200(a)
3-TV-67-6008	ISTC-1200(a)
3-SMV-67-7007	ISTC-1200(a)
3-SMV-67-7008	ISTC-1200(a)

Flow Diagram: 3-47E860-1

VALVE ID	EXEMPTION BASIS
3-RTV-43-186	ISTA-1100

Appendix F - Code Class 1, 2, and 3 Valves Exempt from IST Program

Flow Diagram: 3-47E865-12

VALVE ID	EXEMPTION BASIS
3-RTV-64-208A	ISTC-1200(c)
3-RTV-64-211	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-RTV-64-213	ISTC-1200(c)
3-SHV-64-676	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-SHV-64-680	ISTC-1200(c)
3-SHV-64-684	ISTC-1200(c)
3-SHV-64-686	ISTC-1200(c)

Flow Diagram: 3-47E866-7

VALVE ID	EXEMPTION BASIS
3-CKV-67-761	ISTC-1200(c)
3-CKV-67-762	ISTC-1200(c)
3-CKV-67-764	ISTC-1200(c)
3-CKV-67-765	ISTC-1200(c)
3-CKV-67-771	ISTC-1200(c)
3-CKV-67-772	ISTC-1200(c)
3-CKV-67-774	ISTC-1200(c)
3-CKV-67-775	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-PCV-67-78	ISTC-1200(b)
3-SHV-67-760	ISTC-1200(c)
3-SHV-67-763	ISTC-1200(c)
3-VTV-67-767	ISTC-1200(c)
3-DRV-67-768	ISTC-1200(c)
3-SHV-67-770	ISTC-1200(c)
3-SHV-67-773	ISTC-1200(c)
3-VTV-67-777	ISTC-1200(c)
3-DRV-67-778	ISTC-1200(c)

VALVE ID	EXEMPTION BASIS
3-PCV-67-79	ISTC-1200(b)
3-RTV-67-296A	ISTC-1200(a)
3-RTV-67-297A	ISTC-1200(a)
3-RTV-67-298A	ISTC-1200(a)
3-TCV-67-518	ISTC-1200(b)
3-TCV-67-519	ISTC-1200(b)
3-DRV-67-766	ISTC-1200(a)
3-DRV-67-776	ISTC-1200(a)
3-VTV-67-1142	ISTC-1200(a)

Flow Diagram: 3-47E867-3

VALVE ID	EXEMPTION BASIS
3-TV-43-165	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-TV-43-176	ISTC-1200(a)

VALVE ID	EXEMPTION BASIS
3-TV-43-178	ISTC-1200(a)
3-TV-43-2378	ISTC-1200(a)

Appendix G

Detailed Analysis
In-Service Testing Requirements for As-Found Testing When Performing Preventive Maintenance (PM) or other Maintenance Activities.

This evaluation is to address a generic preconditioning concern in accordance with the "Guidelines" provided in NETP-116.3, Rev 0000, Inservice Testing Program Preconditioning Guidelines"

This concern is related to the potential for generically preconditioning Quarterly IST surveillance tests, remote position indication tests, or Cold Shutdown (CSD)/Refueling Outage (ROJ) justified IST Surveillance tests if Maintenance or Maintenance related PM activities are scheduled and performed immediately prior to the IST surveillance test.

1. ANSWER the following questions to determine the acceptability of the preconditioning activity:

    1. Does the alteration, variation, manipulation or adjustment ensure the component will meet the surveillance test acceptance criteria?

        Yes - The scheduled performance of Maintenance or Maintenance related PM activities immediately prior to the IST surveillance test could ensure the component will meet the surveillance test acceptance criteria.

    2. Would the component have failed the surveillance without the alteration, variation, manipulation or adjustment?

        No - There is no reason to believe the components would fail the IST surveillance in this evaluation since we are not evaluating components that have been taken out of service for a failure, but, instead to perform normally scheduled maintenance activities.

    3. Does the practice bypass or mask the as-found condition?

        Yes - The scheduled performance of Maintenance or Maintenance related PM activities immediately prior to the IST surveillance test could bypass or mask the as-found condition.

    4. Is the alteration, variation, manipulation or adjustment routinely performed just before the testing?

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No - As shown on the attached detailed evaluation, the practice would not be routinely scheduled or performed just before testing.

5. Is the alteration, variation, manipulation, or adjustment performed only for scheduling convenience?

   Yes - in the issue under evaluation, some would be performed just before the IST Surveillance to provide for a scheduling convenience.

Since some of the answers above were 'Yes' this documents that in some cases, preconditioning of the IST surveillance test results would occur. Therefore, the remaining question in the NETP 116.3 "guideline" will be answered to determine if it is acceptable preconditioning.

6. Is the alteration, variation, manipulation, or adjustment required to prevent personnel injury or equipment damage? If yes, explain below.

   No

7. Does the alteration, variation, manipulation, or adjustment provide performance data or information that is equivalent to or superior to that provided by the surveillance test? If yes, explain below.

   No

8. Does the alteration, variation, manipulation, or adjustment being performed to repair, replace, inspect, or test a component that is inoperable or is otherwise unable to meet the surveillance test acceptance criteria? If yes, explain below.

   No

9. Is there justification to support classification of the alteration, variation, manipulation, or adjustment as acceptable preconditioning? If yes, explain below; provide references.

   Yes - The attached supplemental analysis provides the cited references and analysis to support the determination that the preconditioning of the concerns for the IST surveillances are acceptable preconditioning.

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Remarks:

At stated above, this evaluation addresses all IST Quarterly surveillances, remote position indication tests, and IST surveillances that have a deferred test justification for a cold shutdown or a refueling outage as documented in 0-TI-362, the BFN IST program plan.

The preconditioning activities addressed in the attached evaluation are herein considered "Acceptable"

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Supplemental Analysis In-Service Testing Requirements for As-Found Testing When Performing Preventive Maintenance (PM) Activities.

Purpose

The purpose of this supplemental analysis is to determine the requirements for as-found testing in accordance with the In-Service Testing Program requirements as defined in the 2004 edition, 2006 addenda, of the ASME OMb Code (OM Code). Additional guidance is provided by NRC in NUREG 1482, Rev 1, Guidelines for Inservice Testing at Nuclear Power Plants.

This paper will analyze the OM code requirements and the NUREG 1482 guidance to determine when and if as-found testing is required prior to performing preventive maintenance on a component. In order to determine this there must be an understanding of the specific code requirements for certain components and the NRC guidance on both testing in the as-found condition and when unacceptable preconditioning of a component may occur.

Summary

In summary, the NRC guidance directs that testing should, where practical, be in the as-found condition. That is the situation that generally represents the condition of a standby component if it were actuated in the event of an accident (i.e., no preconditioning prior to actuation). However, the NRC guidance on acceptable preconditioning allows maintenance to be performed prior to the test as long as there is no routine scheduling of the activities in that order. This allows for routine preventive maintenance to be performed in the most efficient manner without having to consider as-found testing as long as you can document that unacceptable preconditioning has not occurred. This white paper will document the analysis required by the NUREG for generic conditions associated with preconditioning and as-found testing. This analysis will show that as-found testing is not required when performing preventive maintenance activities for IST components tested on a quarterly basis, as long as there are no quarterly maintenance related PMs for the individual component, and for cold shutdown (CSJ) or refueling outage (ROJ) justified components, if the PM is performed less frequent than every second refueling outage (R02) or every four years (4Y). Specifically, for CSJ or ROJ components, an as found is not required if the PM is scheduled at R03, R04 or greater, or at 5Y or greater. This analysis also shows that as-found testing is not required for remote position indication tests associated with IST components tested on a quarterly basis and for Passive or CSJ/ ROJ components if the PM is performed less frequent than every second refueling outage (R02) or every four years (4Y).

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Table 1 provides the list of IST ROJ/CSJ justified components potentially subject to unacceptable preconditioning.

Table 2 provides the list of IST/AIST passive components with remote position indication potentially subject to unacceptable preconditioning.

Table 3 provides the list of Augmented IST (AIST) ROJ/CSJ justified components potentially subject to unacceptable preconditioning.

Regulatory Requirements and NRC Guidance

OM Code Requirements

There are two instances in the OM Code that specifically require as-found testing and these are as follows:

1. OM Code Mandatory Appendix I, In Service Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants

   Paragraph I-3300 states: "Periodic testing of all pressure relief devices is required. No maintenance, adjustment, disassembly, or other activity that could affect "as found" set pressure or seat tightness data is permitted prior to testing."

2. ASME Code Case OMN-1, Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light Water Reactor power Plants

   Paragraph 3.3 (b) states: "In service tests shall be conducted in the as-found condition. Maintenance activities, such as stem lubrication, shall not be conducted if they might invalidate the as-found condition for inservice testing."

The discussion on OMN-1 does not apply at BFN as we have not committed to implementation of OMN-1. Therefore preconditioning of IST related MOV's falls under the generic NRC guidance discussed in this white paper. However, a decision to not apply the OMN-1 guidance to MOVs, with respect to as-found testing, would not be a conservative decision.

NUREG 1482 Guidance

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Paragraph 3.6, Testing in the As-Found Condition

This paragraph specifically recognizes that the OM code does not require testing in the as-found condition except for the specific components discussed above, such as MOVs. However, this paragraph then provides additional guidance on the staff's position with respect to the IST components not specifically referenced in the OM Code. This guidance is restated in the following:

"The "as-found" condition is generally considered to be the condition of a valve without pre-stroking or maintenance. The OM code does not require stroke-time testing or check valve stroking prior to maintenance; however, degradation mechanisms may not be identified if the licensee does not perform any as-found testing. However, the staff encourages licensees to perform as-found testing, where practical. The staff also cautions licensees to consider the timing of maintenance with regard to the required test intervals and the potential for preconditioning. Post-maintenance testing is required when the maintenance could have affected the valves performance. As-found testing may also apply to pumps in a similar fashion. Most inservice testing is performed in a manner that generally represents the condition of a standby component if it were actuated in the event of an accident (i.e., no preconditioning prior to actuation)

Section 3.5, Preconditioning of Pumps and Valves, Paragraph 3.5.4, NRC Recommendation

"The NRC staff has provided examples of acceptable and unacceptable preconditioning of plant components prior to testing in such documents as IN-97-16 and NRC Inspection Manual, Part 9900. Where the ASME code does not provide specific provisions related to as-found testing of a pump or valve in the IST program, the staff considers acceptable preconditioning to include such activities as (1) periodic venting of pumps, which is not routinely scheduled directly prior to testing but may occasionally be performed before testing; (2) pump venting directly prior to testing, provided that the venting operation has proper controls with a technical evaluation to establish that the amount of gas vented would not adversely affect pump operation; (3) occasional lubrication of a valve stem prior to testing of the valve, where stem lubrication is not typically performed prior to the testing; and (4) unavoidable movement attributable to the setup and connection of test equipment. In each instance of the acceptable preconditioning, the staff will expect the licensee to have available a documented evaluation of the preconditioning activity and a justification for continued confidence in the capability of the IST program to assess the operation readiness of the pump or valve. Generic evaluations may be acceptable as long as the evaluation bounds the conditions of specific activity performed on the SSC."

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Section 3.5, Preconditioning of Pumps and Valves, Paragraph 3.5.2, NRC Guidance

This paragraph in part states: "Some activities would constitute unacceptable preconditioning of a pump or valve to be tested under the IST program. NRC Inspection Manual, Part 9900, defines unacceptable preconditioning of an SSC as an activity that alters one or more of the SSC's operational parameters and, thereby results in acceptable test results. For example, a preventive maintenance activity might constitute unacceptable preconditioning of a pump or valve if the licensee routinely conducts the activity prior to testing."

Analysis

This analysis applies to all IST components with the exception of Pressure and Relief Devices, Snubbers, and components tested under 10CFR Appendix J. This analysis does not apply to the components listed above since they have formal documented requirements for as-found testing defined in their respective controlling documents.

In Section 3.5, Paragraph 3.5.4 as stated above, NRC makes it clear in examples (1) and (3) that activities such as pump venting and stem lubrication can be considered acceptable preconditioning as long as the practice is not routinely scheduled prior to the IST test. This example specifically addresses two activities, but, can be appropriately applied to any PM activity that has potential for affecting the test results. The key concept that NRC was stressing in these examples was that you cannot routinely schedule activities that could affect the as-found condition of the component being tested. This is further supported by Section 3.5, Paragraph 3.5.2, that also stresses the unacceptable preconditioning is based on the routine scheduling of the activity, not on the single instance of the activity occurring prior to testing.

In these examples it is clear that a non-routine occurrence of the PM activity prior to testing, could result in a successful test and would be considered preconditioning. However, unless it is routinely scheduled to occur that way it would be considered acceptable preconditioning. The application of this analysis at BFN will be addressed in the examples below based on the IST testing frequency as compared to the PM frequencies.

Quarterly IST Tests

The majority of IST testing is performed on a quarterly basis. A review of PM activities at BFN on these components showed that there are no PM activities with a quarterly frequency on IST components. The PMs with the most frequent performance would be 18 months and 24 months with most being at 4 years or greater. In considering the 18 month frequency PM, since it is the

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most limiting, it can only be scheduled in a fashion that could affect the test results in one quarterly test out of every six. This does not meet the guidance for unacceptable preconditioning, since it cannot be routinely scheduled in such a fashion that it would routinely affect the as-found condition of the component. Therefore, if it were scheduled prior to the IST test in the one quarter out of six that it would be performed it would be considered acceptable preconditioning and therefore, by definition, no quarterly IST tests require as-found testing when performing routine PM activities. This discussion also applies to other maintenance activities as they relate to Quarterly IST Surveillances.

Cold Shutdown and Refueling Outage Justified Components

The OM code allows in certain circumstances that components may be tested in either cold shutdown conditions or refueling outages if they cannot be tested on line. These components are analyzed separately since, as a result, their testing frequencies are every 24 months. The same logic applied when analyzing the quarterly IST testing frequencies will be applied for the ROJ and CSJ components. However, in these examples, a decision was made as to what frequency would constitute potentially unacceptable preconditioning. The determination was made that an R01 (every refueling outage) or R02 (every second refueling outage) frequency might result in unacceptable preconditioning since it would be possible to schedule the PMs immediately prior to the IST test either every or every other refueling outage. Any PM activity with an R01 or R02 frequency could result in unacceptable preconditioning if scheduled to be performed prior to the IST surveillance.

Remote Position Indication and Passive Components

Remote position indication tests are required every two years in order to assure the indication lights reflect valve travel. The three areas required to be addressed include: remote position indication for components with quarterly tests, remote position indication for CSJ/ROJ justified tests, and remote position indication on passive components.

IST components with quarterly surveillance tests, utilize the indication lights to provide stroke time measurements for each test. Additionally, a determination of erratic action or abnormality is documented based on the indication for each test performed. Therefore, even though the remote position indication tests requires an observer at the valve, which the quarterly test does not, there will be seven quarterly tests documenting the adequacy of the indication lights and the scheduling of a PM/CM activity immediately prior to the remote position indication test would be considered acceptable preconditioning.

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Remote position indication tests for IST components with CSJ or ROJ justifications could be unacceptably preconditioned, in the same manner as other CSJ/ROJ frequency tests, if the PM activity is scheduled at an R01 or R02 frequency. Therefore, for any CSJ/ROJ justified components that have remote position indication tests, the consideration for unacceptable preconditioning must, also, be addressed when scheduling the remote position indication tests.

Passive components within the IST program do not have required testing unless they also have remote position indication lights. In these cases the OM code requires verification of the lights every two years (No grace can be applied). This two year frequency is the same as a ROJ justification and the same logic applies. If the PM activity could be performed on an R01 (every refueling outage) or R02 (every second refueling outage) frequency then this might result in unacceptable preconditioning since it would be possible to schedule the PMs immediately prior to the remote position indication test either every or every other refueling outage. Any PM activity with an R01 or R02 frequency could result in unacceptable preconditioning if scheduled to be performed prior to the remote position indication test for passive components with remote position indicating lights.

Performance of As-Found Tests

The body of 0-TI-362 identifies the required tests for a given component. However, this is provided for information only and is not a definitive list. In order to determine which tests should be performed for an as-found test, the planned work order should be consulted. If a test is required as a Post-Maintenance Test, in accordance with PMT-0-000-TST-001, then that will be the test required to be performed as an as-found test.

In order to take credit for an as-found test, it must be performed within 92 days of the start of the work activity.

Conclusion

The analysis presented above does not apply to component types that have specific requirements for as-found testing. These component types are: Pressure and Relief Devices, Snubbers, and components tested under 10CFR Appendix J.

With the exceptions noted above, this analysis concluded that as-found testing should not be required when performing preventive maintenance or other maintenance activities for IST components tested on a quarterly basis and for CSJ or ROJ components, if the PM/CM is performed less frequent than every second refueling outage (R02) or every four years (4Y).

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Specifically, an as found test is not required if the PM is scheduled at R03, R04 or greater, or at 5Y or greater for CSJ or ROJ components. With respect to remote position indication, as-found testing would not be required for remote position indication testing on IST components with a quarterly IST test or on passive or CSJ/ROJ components with remote position indication if the PM/CM is performed less frequent than every second refueling outage (R02) or every four years (4Y).

In summary, a practice of routinely scheduling outage related PM activities prior to performing a cold shutdown or refueling outage justified surveillance (in order to use the surveillance as a post maintenance test) is unacceptable preconditioning that is the result of a scheduling convenience and is in contradiction to specific guidance issued by NRC

This conclusion was based on NRCs guidance contained in NUREG 1482, Rev. 1, which identified unacceptable preconditioning occurs when a task that could affect the as-found test was routinely scheduled prior to the test.

Provided in the Attachments to this document are the list of components within the IST program that meet the criteria for requiring review prior to scheduling PM or maintenance activities to ensure they are not unacceptably preconditioned

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Table 1

List of IST Components to be addressed for Potential Unacceptable Preconditioning

ROJ/CSJ Justified Components

UNID	Description	Exercise / Stroke Time	Fail Safe	Remote Position Indication
1, 2, 3-FCV-1-14	MN STM LINE A INBD ISOL VALVE	Fast Closure	Close	Open/Close
1, 2, 3-FCV-1-15	MN STM LINE A OUTBD ISOL VALVE	Fast Closure	Close	Open/Close
1, 2, 3-FCV-1-26	MN STM LINE B INBD ISOL VALVE	Fast Closure	Close	Open/Close
1, 2, 3-FCV-1-27	MN STM LINE B OUTBD ISOL VALVE	Fast Closure	Close	Open/Close
1, 2, 3-FCV-1-37	MN STM LINE C INBD ISOL VALVE	Fast Closure	Close	Open/Close
1, 2, 3-FCV-1-38	MN STM LINE C OUTBD ISOL VALVE	Fast Closure	Close	Open/Close
1, 2, 3-FCV-1-51	MN STM LINE D INBD ISOL VALVE	Fast Closure	Close	Open/Close
1, 2, 3-FCV-1-52	MN STM LINE D OUTBD ISOL VALVE	Fast Closure	Close	Open/Close
1, 2, 3-PCV-1-145	STM SEAL BYPASS ISOL	Close	N/A	Open/Close
1, 2, 3-PCV-1-147	MS STM SEAL ISOL	Close	Close	Open/Close
1, 2, 3-PCV-1-151	STEAM TO SJAE 3A STAGES I & II	Close	Close	Open/Close
1, 2, 3-PCV-1-153	STEAM TO SJAE 3B STAGES I & II	Close	Close	Open/Close
1, 2, 3-PCV-1-166	STEAM TO SJAE 3A STAGE III	Close	Close	Open/Close
1, 2, 3-PCV-1-167	STEAM TO SJAE 3B STAGE III	Close	Close	Open/Close

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Table 1

List of IST Components to be addressed for Potential Unacceptable Preconditioning

ROJ/CSJ Justified Components

UNID	Description	Exercise / Stroke Time	Fail Safe	Remote Position Indication
1, 2, 3-FCV-1-168	MAIN STEAM LINE A DRAIN VALVE	Open	N/A	Open/Close
1, 2, 3-FCV-1-169	MAIN STEAM LINE B DRAIN VALVE	Open	N/A	Open/Close
1, 2, 3-FCV-1-170	MAIN STEAM LINE C DRAIN VALVE	Open	N/A	Open/Close
1, 2, 3-FCV-1-171	MAIN STEAM LINE D DRAIN VALVE	Open	N/A	Open/Close
1, 2, 3-CKV-3-554	FDWTR LN A OUTBD ISOL	Open/Close	N/A	N/A
1, 2, 3-CKV-3-558	FDWTR LN A INBD ISOL	Open/Close	N/A	N/A
1, 2, 3-CKV-3-568	FDWTR LN B OUTBD ISOL	Open/Close	N/A	N/A
1, 2, 3-CKV-3-572	FDWTR LN B INBD ISOL	Open/Close	N/A	N/A
1, 2, 3-FCV-68-3	RECIRC PUMP 3A DISCHARGE VALVE	Close	N/A	Open/Close
1, 2, 3-FCV-68-79	RECIRC PUMP 3B.DISCH VALVE	Close	N/A	Open/Close
3-CKV-69-628	RWCU TO FDWTR ISOL	Open / Close	N/A	N/A
1, 3-CKV-69-629	RWCU TO FDWTR ISOL	Open / Close	N/A	N/A
2-CKV-69-630	RWCU TO FDWTR ISOL	Open / Close	N/A	N/A
1, 2, 3-FCV-70-47	RBCCW RTN CNTMT ISOL VLV	Close	N/A	Open/Close
1, 2, 3-FCV-74-47	RHR SHUTDOWN COOLING SUCT OUTBD ISOL VLV	Open / Close	N/A	Open/Close

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Table 1

List of IST Components to be addressed for Potential Unacceptable Preconditioning

ROJ/CSJ Justified Components

UNID	Description	Exercise / Stroke Time	Fail Safe	Remote Position Indication
1, 2, 3-FCV-74-48	RHR SHUTDOWN COOLING SUCT INBD ISOL VLV	Open / Close	N/A	Open/Close
1, 2, 3-FCV-74-53	RHR SYS I LPCI INBD INJECT VALVE	Open / Close	N/A	Open/Close
1, 2, 3-CKV-74-54	RHR LP I CKV	Open / Close	N/A	N/A
1, 2, 3-FCV-74-67	RHR SYS II LPCI INBD INJECT VALVE	Open / Close	N/A	Open/Close
1, 2, 3-CKV-74-68	RHR LP II CKV	Open / Close	N/A	N/A
1, 2, 3-CKV-74-661	RHR THERMAL RLF	Open / Close	N/A	N/A
1, 2, 3-CKV-74-662	RHR THERMAL RLF	Open / Close	N/A	N/A
1, 2, 3-FCV-75-25	CORE SPRAY SYS I INBD INJECT VALVE	Open / Close	N/A	Open/Close
1, 2, 3-CKV-75-26	CS LP I CKV	Open / Close	N/A	N/A
1, 2, 3-FCV-75-53	CORE SPRAY SYS II INBD INJECT VALVE	Open / Close	N/A	Open/Close
1, 2, 3-CKV-75-54	CS LP II CKV	Open / Close	N/A	N/A
1, 2, 3-CKV-85-589	CHGING WTR (185 TOTAL)	Open/Close	N/A	N/A

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Table 2

List of IST/AIST Components to be addressed for Potential Unacceptable Preconditioning

Passive Components with Remote Position Indication

UNID	Description	Remote Position Indication
0-FCV-67-48	EECW/RHRSW XTIE	Open/Close
0-FCV-67-49	EECW/RHRSW XTIE	Open/Close
1, 2, 3-FCV-1-57	MS DRN TO COND ISOL	Open/Close
1, 2, 3-FCV-1-154	AUX STM TO STM SEAL ISOL	Open/Close
1, 2, 3-FCV-6-153	RFPT 1A STOP VLV DRN	Open/Close
1, 2, 3-FCV-6-155	RFPT 1B STOP VLV DRN	Open/Close
1, 2, 3-FCV-6-157	RFPT 1C STOP VLV DRN	Open/Close
1, 2-FCV-23-57	STANDBY COOLANT ISOL	Open/Close
1, 2, 3-FCV-71-37	RCIC INJ OUTBD ISOL	Open/Close
1, 2, 3-FCV-73-34	HPCI INJ OUTBD ISOL	Open/Close
2, 3-FCV-74-46	RHR SYS I-II CROSSTIE VLV	Open/Close
2, 3-FCV-74-96	RHR PMP A SUCT XTIE	Open/Close
2, 3-FCV-74-97	RHR PMP C SUCT XTIE	Open/Close
1, 2-FCV-74-98	RHR PMP B SUCT XTIE	Open/Close
1, 2-FCV-74-99	RHR PMP D SUCT XTIE	Open/Close
3-FCV-74-100	RHR HTX A-C XTIE TO U2 B-D RHR HTX	Open/Close

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Table 2

List of IST/AIST Components to be addressed for Potential Unacceptable Preconditioning

Passive Components with Remote Position Indication

UNID	Description	Remote Position Indication
1, 2-FCV-74-101	RHR HTX B-D DISCH XTIE	Open/Close
1, 2, 3-FCV-75-23	CS LP I INJ	Open/Close
1, 2, 3-FCV-75-51	CS LP II INJ	Open/Close
1, 2, 3-FCV-78-61	RHR TO FPC SUPPLY	Open/Close
1, 2, 3-SHV-74-11	RHR PUMP A CNDS SUCTION SOV	Open/Close
1, 2, 3-SHV-74-23	RHR PUMP C CNDS SUCTION SOV	Open/Close
1, 2, 3-SHV-74-34	RHR PUMP B CNDS SUCTION SOV	Open/Close
1, 2, 3-SHV-74-45	RHR PUMP D CNDS SUCTION SOV	Open/Close
1, 2, 3-SHV-74-91	RHR TO FUEL POOL F/D SOV	Open/Close
3-SHV-74-150	RHR SYS I & II DISCH CROSSTIE SOV	Open/Close
1, 2, 3-SHV-75-3	CS PMP 1A CNDS SUCT VLV	Open/Close
1, 2, 3-SHV-75-12	CS PMP 1C CNDS SUCT VLV	Open/Close
1, 2, 3-SHV-75-31	CS PMP 1B CNDS SUCT VLV	Open/Close
1, 2, 3-SHV-75-40	CS PMP 1D CNDS SUCT VLV	Open/Close

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Table 3

List of AIST Components to be addressed for Potential Unacceptable Preconditioning
AIST ROJ/CSJ Justified Components

UNID	Description	Exercise / Stroke Time	Fail Safe	Remote Position Indication
1, 3-CKV-32-3749	Control Air/CAD Check Valve	Open/Close	Close	N/A
1, 3-CKV-32-3750	Control Air/CAD Check Valve	Open/Close	Close	N/A
1, 2, 3-FCV-64-17	DW SPLY CNTMT ISOL	Close	Close	Open/Close
1, 2, 3-FCV-64-18	DW SPLY CNTMT ISOL	Close	Close	Open/Close
1, 2, 3-FCV-64-19	PSC SPLY CNTMT ISOL	Close	Close	Open/Close
1, 2, 3-FCV-64-28A	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28B	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28C	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28D	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28E	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28F	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28G	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28H	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close

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Table 3

List of AIST Components to be addressed for Potential Unacceptable Preconditioning
AIST ROJ/CSJ Justified Components

UNID	Description	Exercise / Stroke Time	Fail Safe	Remote Position Indication
1, 2, 3-FCV-64-28J	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28K	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28L	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-28M	DRYWELL VACUUM RELIEF VALVE	Open/Close	Close	Open/Close
1, 2, 3-FCV-64-29	DW EXH CNTMT ISOL	Close	Close	Open/Close
1, 2, 3-FCV-64-30	PSC VAC RLF ISOL	Close	Close	Open/Close
1, 2, 3-FCV-64-32	PSC EXH OUTBD CNTMT ISOL	Close	Close	Open/Close
1, 2, 3-FCV-64-33	PSC EXH INBD CNTMT ISOL	Close	Close	Open/Close
1, 2, 3-FSV-76-49	DW H2 ANLYZR A INBD ISOL	Open/Close	Close	Open/Close
1, 2, 3-FSV-76-50	DW H2 ANLYZR A OUTBD ISOL	Open/Close	Close	Open/Close
1, 2, 3-FSV-76-55	PSC H2 ANLYZR A INBD ISOL	Open/Close	Close	Open/Close
1, 2, 3-FSV-76-56	PSC H2 ANLYZR A OUTBD ISOL	Open/Close	Close	Open/Close
1, 2, 3-FSV-76-57	PSC RTN INBD ISOL	Open/Close	Close	Open/Close
1, 2, 3-FSV-76-58	PSC RTN OUTBD ISOL	Open/Close	Close	Open/Close

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Table 3

List of AIST Components to be addressed for Potential Unacceptable Preconditioning
AIST ROJ/CSJ Justified Components

UNID	Description	Exercise / Stroke Time	Fail Safe	Remote Position Indication
1, 3-CKV-84-709	CAD to Control Air CKV	Open/Close	Close	N/A
2-PCV-84-654	CAD/CA Flow to FSV-64-20/21	Note 1	Open	N/A

Note 1: 2-PCV-84-654 is a 3 way pressure control valve. The valve is exercised to allow flow to 2-FSV-64-20/21 from both control air and CAD. It does not have an 'Open/Close' exercise.