



Entergy Operations, Inc.

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St. Francisville, LA 70775
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Timothy Schenk

Manager – Regulatory Assurance

RBG-47808

November 30, 2017

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

River Bend Station, Unit 1
Docket No. 50-458
License No. NPF-47

SUBJECT: Inservice Inspection Plan for the Fourth Ten-Year Interval

Dear Sir or Madam:

As required by paragraph IWA-1400(c) of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, attached is the approved Inservice Inspection (ISI) Plan for the ten-year interval at River Bend Station, Unit 1 (RBS). This interval commenced on December 1, 2017, and concludes on November 30, 2027. The plan is attached.

Entergy is providing this plan for information only. Entergy is not requesting NRC approval of the plan.

The plan includes no new commitments.

This letter contains no new regulatory commitments.

If you have any questions or require additional information, please contact Timothy Schenk at 225-381-4177.

Sincerely,

A handwritten signature in black ink, appearing to be "TAS", written over a horizontal line.

TAS/alc

Attachment 1: RBS FOURTH TEN-YEAR INTERVAL INSERVICE TESTING PROGRAM
PLAN

cc: U.S. Nuclear Regulatory Commission
Region IV
1600 E. Lamar Blvd.
Arlington, TX 76011-4511

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Department of Environmental Quality
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Public Utility Commission of Texas
Attn: PUC Filing Clerk
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Austin, TX 78711-3326

RBFI-17-0155

Attachment 1

RBG- 47808

**RBS FOURTH TEN-YEAR INTERVAL INSERVICE TESTING PROGRAM PLAN
(Information Only)**

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 1 OF 26
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RBS FOURTH TEN-YEAR INTERVAL

INSERVICE TESTING PROGRAM PLAN

ENTERGY NUCLEAR ENGINEERING PROGRAMS

APPLICABLE SITES

All Sites: ☐

Specific Sites: ANO ☐ GGNS ☐ IPEC ☐ JAF ☐ PLP ☐ PNPS ☐ RBS ☒ VY ☐
W3 ☐ HQN ☐

Safety Related: ☒ Yes

☐ No

RBS 4th Interval IST Plan

Interval Dates: 12-1-2017 to 11-30-2027

Owner: Entergy Nuclear Operations, Inc. – 1340 Echelon Parkway, Jackson MS 39213

Plant: River Bend Station – 5485 US Highway 61, St. Francisville, La. 70775

Commercial Service Date: 6-16-1986

Program Section Revision Summary	
Current Revision	Description of Change
9	Updated document for Fourth Interval Update.

Any required 50.59 reviews are provided with the program change notices listed above.
NMM EN-LI-100, Revision 10, 5.2[4](d) states that: A PAD is not required for changes to those portions of the Inservice Inspection (ISI) and Inservice Testing (IST) Programs that are controlled in accordance with 10CFR50.55a, and such is the case for this IST program section.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 2 OF 26
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REVIEW AND CONCURRENCE

PROGRAM SECTION NO. SEP-RBS-IST-2

Revision No: 9

Program Section Title: **INSERVICE TESTING PROGRAM PLAN**

Prepared by: CECIL A. GLASS / [Signature] Date: 11/28/2017

Checked by: Justin M. Thibodeaux / Justin T. Date: 11/28/2017
11

(Additional 'Reviewed by' lines may be added as needed)

Concurred: Orlando Rivera / [Signature] Date: 11/28/2017

Responsible Supervisor

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 3 OF 26
--------------	--

Table of Contents

Revision Summary.....	4
------------------------------	----------

Section 1

Inservice Testing Program.....	5
---------------------------------------	----------

List of RBS Systems and Flow Diagram Cross Reference.....	13
--	-----------

List of Systems Subject to Inservice Testing.....	15
--	-----------

Section 2

Inservice Test Program – ASME Code Class 1, 2 and 3 Pumps.....	17
---	-----------

ASME Code Class 1, 2 and 3 Pumps Subject to the Testing Requirements of ISTB.....	15
---	----

Pump Table Legend.....	16
------------------------	----

Standard Code ISTB Group A and B Pumps Attachment.....	Pages 1 of 7
--	--------------

Augmented Pumps Attachment.....	Page 1 of 1
---------------------------------	-------------

Pump Position Statements.....	Page 1 of 1
-------------------------------	-------------

Pump Relief Requests Attachment.....	Pages 1 of 5
--------------------------------------	--------------

Section 3

Inservice Test Program Summary of Valves.....	20
--	-----------

ASME Code Class 1, 2 and 3 Valves Subject to the Testing Requirements of ISTC.....	18
--	----

Valve Table Legend.....	20
-------------------------	----

Standard Code ISTC Valves Attachment.....	Pages 1 of 193
---	----------------

Augmented ISTC Valves Attachment.....	Pages 1 of 2
---------------------------------------	--------------

Cold Shutdown and Refueling Justifications Attachment.....	Pages 1 of 33
--	---------------

Valve Position Statements Attachment.....	Pages 1 of 5
---	--------------

Valve Relief Requests Attachment.....	Pages 1 of 4
---------------------------------------	--------------

CMJ Report.....	Pages 1 of 28
-----------------	---------------

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 4 OF 26
--------------	--

Revision Summary

This revision incorporates all changes related to the Fourth Interval Update.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 5 OF 26
--------------	--

SECTION 1

Inservice Testing Program

Introduction

The Inservice Testing Program described herein has been developed as required by Section 50.55a of 10 CFR Part 50 to implement the requirements of ASME OM CODE-2004 through 2006 Addenda. The safe shutdown condition for RBS is Cold Shutdown.

Applicability

Consistent with Section 50.55a of 10 CFR Part 50, this program is applicable to the inservice testing of in-scope ASME Code Class 1, 2 and 3 components for the unit's fourth ten-year interval. An Inservice Testing Program for ASME Code Class 1, 2 and 3 and augmented components is identified in RBS Technical Specification 5.5.6 and RBS Technical Requirements Manual 5.5.6.

The Code of Federal Regulations, Title 10, Part 50.55a (10CFR50.55a), paragraph (f)(5)(i) requires each licensee of pressurized water-cooled nuclear reactors to revise their inservice testing program to meet the requirements of 10CFR50.55a(f)(4)(ii). As a result, the inservice testing program must be revised at 120-month intervals to comply with the requirements of the latest edition and addenda of the Code incorporated by reference in 10CFR50.55a(b) 12 months before the start of the 120-month interval subject to the conditions listed in 10CFR50.55a(b)(3).

10CFR50.55a Conditions

Conditions from 10CFR50.55a(b)(3) are incorporated into this IST Program as described below.

10CFR50.55a(b)(3)(i) – NQA-1, “Nuclear Quality Assurance Requirements for Nuclear Facilities”

This condition is incorporated into the IST Program by means of reference to RBS's quality assurance program to implement these requirements.

10CFR50.55a(b)(3)(ii) – Motor-Operated Valve Testing

RBS will maintain and implement motor-operated valve testing program to ensure motor-operated valves will continue to be capable of performing the design basis safety function. The RBS motor-operated valve testing program is governed by the 89-10 Program.

10CFR50.55a(b)(3)(iii) – New Reactors

No action required.

10CFR50.55a(b)(3)(iv) – Check Valves (Appendix II)

RBS's Appendix II Check Valve Condition Monitoring Program is governed by CEP-IST-4 which contains provisions for trending and evaluation, bidirectional testing, and limits initial test intervals to two fuel cycles or 3 years, whichever is longer.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 6 OF 26
--------------	--

Additionally, Table II – Maximum Intervals For Use When Applying Interval Extensions is captured in CEP-IST-4.

TABLE II—MAXIMUM INTERVALS FOR USE WHEN APPLYING INTERVAL EXTENSIONS

Group size	Maximum interval between activities of member valves in the groups (years)	Maximum interval between activities of each valve in the group (years)
≥4	4.5	16
3	4.5	12
2	6	12
1	Not applicable	10

Safety classification of pumps, valves, and pressure relief devices at RBS is described in UFSAR Section 3.2 and is shown in UFSAR Table 3.2-1.

In accordance with 10CFR50.55a(f)(4) and NUREG-1482, paragraphs 2.2 and 2.2.1, the scope of IST includes ASME Code Class 1, 2, 3 and MC components. Additionally, for pumps and valves that are within the scope of the ASME OM Code but are not classified as ASME Code Class 1, Class 2, or Class 3 will be classified and tested as an augmented component within the RBS IST Program. This use of an augmented IST program is acceptable. All deviations from the ASME OM Code will be documented and will provide an acceptable level of quality and safety, or will explain that implementing the Code provisions will result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Applicable Codes

In accordance with Section 50.55a of 10 CFR Part 50, the applicable code is 2004 Edition through the 2006 Addenda. This is referred to as the Code in the remaining text. The 2009 Edition will be used for Mandatory Appendix I Inservice Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants.

Program Description

The list on the following page identifies the River Bend Station ASME Code Class 1, 2 and 3 plant specific systems subject to the inservice testing requirements of the Code. The subject systems are derived from the latest River Bend Station Code Boundary drawings.

Sections 2 and 3 identify the ASME Code Class 1, 2 and 3 pumps and valves to be tested in accordance with the Code. The pumps and valves are listed followed by both general and specific relief requests where it has been found that the testing requirements for that pump or valve are impractical, as applicable. In such instances, appropriate alternative testing provisions have been identified. General relief requests are used when the impracticality of a particular test requirement applies to more than one pump or more than one valve. Specific relief requests are unique to a particular pump or valve.

The testing program outlined in Sections 2 and 3 has been developed following a design review. Should certain Code requirements prove to be impractical due to unforeseen circumstances, subsequent relief from that requirement will be requested.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 7 OF 26
--------------	--

The IST Plan is just one part of the RBS IST Program; other parts include:

- Site Program Section No. SEP- RBS -IST-1, RBS IST Bases Document:

Primarily used to document the component function reviews performed to determine those components that are subject to IST.
- Program Section No. CEP-IST-4, Standard on IST: Primarily used to provide the consolidated and standardized technical requirements, including Entergy positions, for compliance with the regulatory requirements governing pump and valve IST.
- RBS IST Program Files: Defined as all of the elements (Historic files and Ideal databases) used to produce the IST Program.

The IST Plan is controlled and implemented in accordance with NMM Procedure EN-DC-332, Inservice Testing and NMM Procedure EN-DC-174, Engineering Program Sections. Program Change Notices (PCNs), which may be used to request changes to this IST Plan, are initiated and processed per EN-DC-174. The IST Program Revision Flow Chart contained in Section 6 of SEP-RBS-IST-1 provides additional guidance.

This document constitutes the IST Plan for that plant. This document contains the following information:

- Valve Relief Requests and Valve Position Statements
- Pump Relief Requests and Pump Position Statements
- Cold Shutdown Justifications, Refueling Outage Justifications, and Check Valve Condition Monitoring Justifications, as applicable
- Valve Summary Listings
- Pump Summary Listings

Justifications

Cold shutdown/refueling justifications are provided for those components where test frequency varies within Code allowances. NUREG-1482 "Guidelines for Inservice Testing at Nuclear Power Plants", was used in developing these justifications.

Valve Position Statements are provided for those components where test frequency varies within Code allowances for Non-Safety related components. Guidance provided with NUREG-1482 "Guidelines for Inservice Testing at Nuclear Power Plants", was used in developing these justifications.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 8 OF 26
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Relief Requests

Relief requests are written in accordance with 10CFR50.55a when specific requirements for inservice testing are considered impractical or pose an undue burden on the licensee. The enclosed relief requests, if any, are subject to change throughout the inspection interval. If requirements are determined to be impractical, or result in hardship or unusual difficulty without a compensating increase in the level of quality and safety, during the course of the interval, additional or modified relief requests will be submitted in accordance with 10CFR50.55a. NUREG-1482 "Guidelines for Inservice Testing at Nuclear Power Plants", is used in developing justification for the basis of the relief requests.

The NRC staff has reviewed the subject requests and concludes, as set forth in the safety evaluation, that Entergy Operations, Inc. has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1) and 10 CFR 50.55a(z)(2) for relief requests PRR-RBS-2017-1, PRR-RBS-2017-2, and VRR-RBS-2017-1. Therefore, the NRC staff authorizes the use of the requested alternatives at RBS for the fourth 10-year IST program interval which is scheduled to start on December 1, 2017, and end on November 30, 2027.

Code Cases

In accordance with 10 CFR50.50a(b), code cases referenced in Regulatory Guide (RG) 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code" may be used without obtaining further review. RG 1.192 provides a list of code cases that are acceptable provided they are used in their entirety, with any supplemental conditions specified in the regulatory guide. In addition, RG 1.192 provides a list of code cases which are "conditionally acceptable", meaning that they are acceptable within the limitations described in RG 1.192.

Application of Code Cases

- Code cases to be used during a preservice or inservice test or examination are listed in this IST Program.
- Code cases used in this IST Program are applicable to code of record will be listed in this document.
- Code cases shall be in effect at the time this IST Program is filed, except as provided below.
- Code cases issued subsequent to filing this IST Program may be proposed for use in amendments to this IST Program. Regulatory Guide 1.192,
- OMN-20 - 10CFR50.55a(b)(3)(x) has been approved for use by Licensees ASME OM Code Case OMN-20 "Inservice Test Frequency" which was incorporated by reference in paragraph (a)(1)(iii)(G).
- OMN-18, "Alternative Testing Requirements for Pumps Tested Quarterly with +/- 20% of Design Flow", was submitted and approved by the NRC under Pump Relief Request PRR-RBS-2017-2. The applicable pumps are listed within the Relief Request as part of this program document. The OM Code 2012 Edition published version of OMN-18 was used as a guideline to use Group A Tests performed quarterly within +/- 20 percent of the pump design flow rate, with pressure measuring instrumentation meeting the (+/- ½%) instrument accuracy requirements of Table ISTB-3510-1 specified for the biennial Comprehensive Test. In addition, River Bend Station has elected to restrict the upper limit for differential pressure to 6%, in accordance with the proposed Condition imposed within proposed Revision 2 of Regulatory Guide 1.192.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 9 OF 26
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- OMN-17, "Alternative Rules for Testing of ASME Class 1 Pressure Relief/Safety Valves", is included in the RBS IST Program as part of VRR-RBS-2017-1, for the Main Steam Safety/Relief (MSSR) System relief valves. ASME OM Code Case OMN-17 has not yet be added to RG 1.182, or included in 10 CFR 50.55a by reference. However, the NRC has allowed licensees to use ASME OM Code Case OMN-17, provided all the requirements in the Code Case are met. Consistent with the special maintenance requirement in ASME OM Code Case OMN-17, each SRV at RBS will be disassembled and inspected to verify that internal surfaces and parts are free from defects or service induced wear, prior to the start of the next test interval. This maintenance will also help to reduce the potential setpoint drift, and increase the reliability of these SRVs to perform their design requirement functions. Accordingly, the NRC staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1). See VRR-RBS-2017-1 and RBC-5105 for details.

Application of Revised Code Cases

- Superseded code cases approved for use in accordance with the above may continue to be used.

Application of Annulled Code Cases

- Code cases approved for use may be used after annulment for the duration of that IST Program Interval Program Plan.

Terms and Definitions

- Active: 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.
- Passive: 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.
- Safety-related: required to mitigate the consequences of an accident, shutdown, or maintain shutdown of the reactor.
- Component: an item in nuclear power plant such as a vessel, pump, valve, or piping system.
- Cold Shutdown: (see plant Technical Specifications)
- Engineering Evaluation: an evaluation of indications that exceed allowable acceptance standards to determine if the margins required by the design specifications and construction code are maintained.
- Exercising (of a valve): the demonstration based on direct or indirect visual or other positive indication that the moving parts function satisfactorily.
- Full Stroke Time: that time interval from initiation of the actuation signal to the end of the actuation cycle.
- Test: a procedure to obtain information (through measurement or observation) to determine the operational readiness of a component or system while under controlled conditions.
- Hot Standby: (see plant Technical Specifications)

- Operational Readiness: the ability of a component or system to perform its intended function when required.
- Owner: the organization owning or operating a facility where items are installed or used.
- Normal Plant Operation Conditions: the operating conditions during reactor startup, operation at power, hot standby, and reactor shutdown conditions, as defined by plant Technical Specifications.
- Obturator: valve closure member (disk, gate, plug, ball, etc.)
- Reference Values: one or more values of test parameters measured or determined when the equipment is known to be operating correctly.
- Seat Tightness Test: a qualitative test performed to assess a valve's ability to shut off between its disc and seat in accordance with the Owner established seat tightness criteria typically performed on PORVs as required by ISTC-5112.
- System Resistance: the hydraulic resistance to flow in a system.
- Trending: a comparison of current data to previous data obtained under similar conditions for the same equipment.
- Setpoint: the value for which relief valves are set to relieve pressure.
- Leak Test: testing of valves to verify seat leakage is limited to a specified maximum.
- Stroke Time: the time interval from valve actuation to the limit switch indication light at the end of the actuating cycle.
- Limiting Stroke Time: the maximum time allowed for a valve to stroke before becoming immediately inoperable.
- Relief Requests: a request submitted to the NRC requesting relief from the requirements of the Code for testing a particular component or a generic group of components.
- Justification. For Deferrals: a documented explanation of why a valve can only be tested at a cold shutdown or refueling outage frequency as opposed to quarterly.
- Group A Pump: pumps that are operated continuously or routinely during normal operation, cold shutdown, or refueling operations.
- Group B Pump: pumps in standby systems that are not operated routinely except for testing.
- Category A Valves: valves for which seat leakage is limited to a specific maximum amount in the closed position for fulfillment of their required function(s).
- Category B Valves: valves for which seat leakage in the closed position is inconsequential for fulfillment of the required function(s).
- Category C Valves: 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).
- Appendix J Component: components leak tested for containment integrity under 10CFR50, Appendix J (including Option B).
- Generic Letter 89-10: the NRC letter providing additional requirements in testing MOVs to design basis conditions.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 11 OF 26
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- Generic Letter 96-05: the NRC letter requiring periodic verification of the capability of safety-related MOVs to perform their safety functions consistent with the current licensing bases.
- Generic Letter 96-06: the NRC letter notifying addressees about safety-significant issues that could affect containment integrity and equipment operability during accident conditions.
- NUREG-1482: the NRC document that gives licensees guidelines and recommendations for developing and implementing programs for the inservice testing of pumps and valves.
- ASME OM Code: the section of ASME Codes and Standards Manual that determines how to perform in-service testing of light water reactor nuclear plant components.
- ASME ISTC Code: the part of ASME OM Codes dealing with the in-service testing of valves.
- ASME ISTB Code: the part of ASME OM Codes dealing with the in-service testing of pumps.
- Frequency: the interval of time between in-service testing of the components.
- IST Component: components (valves and pumps) that are required to be tested per ASME OM Code.
- Appendix B Component: components (valves and pumps) tested under of 10CFR50, Appendix B. Used interchangeable with the term "Augmented Test Program"

Appendix B Program Positions/Exceptions

The Appendix B Program may be administered using the ASME IST Code as guidance for testing and trending. Another term for this category of tested components is "Augmented".

Relief Requests and Justification for Deferrals will not be submitted for Appendix B components. Valve Position Statements are used to justify any alternative tests or frequencies.

Program Changes:

The NRC shall be notified of IST Program changes; however, component additions and deletions will be submitted and testing implemented or deleted without prior NRC approval. In the instance where a component has been added to the IST Program, testing and the appropriate program changes will take place within 90 days of revising the program source documents unless determined to be impractical. If a hardship is identified, notification will be submitted to the NRC and an interim extension from testing implementation obtained.

The content of this program document is based on recommendations stated in NUREG-1482 (Rev. 2) and is intended for the purpose of maintaining program continuity and documenting additional discussions and positions relative to Code interpretations. Therefore, changes to this program document will not require prior NRC review and/or approval unless the licensee determines a need to do so.

10 CFR 50.55a(b)(3)(ii) OM condition: Motor-Operated Valve (MOV) testing. Licensees must comply with the provisions for MOV testing in OM Code ISTC 4.2, 1995 Edition with the 1996 and 1997 Addenda, or ISTC-3500, 1998 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(iv) of that section, and must establish a program to ensure that motor-operated valves continue to be capable of performing their design basis safety functions.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 12 OF 26
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OM Code provisions Subsection ISTD associated with dynamic restraints (snubbers) will be covered by snubber program plan documents and submitted separately.

The following documents were used as references in the development of this document:

ASME OM Code 2004 (plus addenda)

Generic Letter 89-10 - Safety-Related Motor-Operated Valve Testing and Surveillance

Generic Letter 96-05 - Periodic Verification of Design-Basis Capability of Safety-Related Power-Operated Valves

Generic Letter 96-06 - Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions

10 CFR 50, Appendix B

10 CFR 50.55a

Technical Specifications

Updated Final Safety Analysis Report (UFSAR)

Regulatory Guide 1.26, Revision 3, February 1976, "Quality Group Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants"

Regulatory Guide 1.192, "Operations and Maintenance Code Case Acceptability, ASME OM Code"

NRC Inspection Procedure 73756

NUREG/CP-0123, Proceedings of the NRC/ASME Symposiums on Pump and Valve Testing

NUREG-1482 (Rev. 2), Guidelines for In-service Testing at Nuclear Power Plants, October 2013

NRC Information Notice 97-90

NRC Information Notice 97-16

EN-DC-131, Revision 6, Check Valve Maintenance and Monitoring Program

SEP-CV-RBS-001, Revision 1, River Bend Station Check Valve Program

Fail-Safe Testing of Valves

All Fail-Safe valves shall be tested in accordance with ISTC-3560. Valves used only for system control, are typically excluded from testing in the IST Program. However, if a control valve must change position to support a safety-related function and it has a fail-safe position, then it will be included in the program and tested to verify the ability to perform that function with power and/or air removed (or simulated power and/or air removal). Additionally, for power-operated control valves that only have a fail-safe safety function, the requirements for valve stroke-time measurement testing, the associated stroke time test acceptance criteria, and any corrective actions that would result from stroke-time testing need not be met (ISTC-5100).

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 13 OF 26
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Skid-Mounted Valves

As specified in ISTC-1200, skid mounted valves will be excluded from the scope of IST test requirements provided they are adequately tested as part of the 'major' component. The licensee however, may opt to include certain components contained on these skids in the IST Program for testing and trending purposes. In such cases, any program changes, exceptions, exemptions, or deferrals will not be submitted to the NRC for prior approval, but simply documented in the program plan.

Valve Stroke-Time Acceptance Criteria:

The following cases present the options available for determining valve operability based on stroke time:

- CASE 1: The valve strokes within its acceptable stroke time. The valve is considered operable.
- CASE 2: The valve fails to change position on the first try or exceeds the LIMITING VALUE. The valve shall be immediately declared inoperable.
- CASE 3: The valve fails to meet the acceptance stroke time, but strokes in less than the LIMITING-VALUE. Per ISTC-5100, the valve shall be immediately stroked again to achieve an acceptable stroke time. Per the RBS Unit 1 Valve Testing Program:

If the valve successfully strokes on the second stroke, the valve is considered operable. The cause of the initial deviation shall be analyzed and the results documented in the record of test (i.e. Condition Report).

If the valve does not fall within the acceptable range on the second stroke, then the valve will be analyzed within 96 hours OR declared inoperable (if applicable). An evaluation must be performed to determine the cause of the failed test (deviation). The evaluation may determine that either corrective maintenance must be performed on the valve or the new stroke data is acceptable and new baselines must be established. Such results must be documented in the record of test (i.e. Condition Report).

List of RBS Systems and Flow Diagram Cross Reference

System No.	System Code	GE Code	System Name	Piping Diagrams
051	RCS	B21	Nuclear Boiler Instrumentation	25-01A
052	RDS	C11	Control Rod Drive Hydraulic (CRD)	36-01A, 36-01C
053	RCS	B33	Reactor Recirculation	25-01C, 25-01E, 25-01F, 32-09C
055	SFT	F42	Refueling Equipment	34-04A

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 14 OF 26
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System No.	System Code	GE Code	System Name	Piping Diagrams
057	JRB		Containment and Drywell Airlocks	0219-711-056-048 0219-713-056-026 0219-713-056-057 0219-714-056-022
106	CNS		Condensate Makeup, Storage, & Transfer	04-03C
107	FWS	B21	Feedwater	06-01B
109	MSS	B21	Main Steam	03-01A, 03-01B, 03-01C, 27-20A, 32-05B
115	CCP		Closed Cooling Water – Reactor Plant	09-01A, 09-01B
121	SAS		Air Service & Breathing	12-02C
122	IAS		Instrument Air	12-01B, 12-01C, 12-01E, 25-01A
201	SLS	C41	Standby Liquid Control (SLC)	27-16A
202	SVV		SVV Compressors/Dryers	03-01B
203	CSH	E22	High Pressure Core Spray (HPCS)	27-04A, 32-09K
204	RHS	E12	Residual Heat Removal – LPCI (RHR)	04-03C, 09-10F, 27-07A, 27-07B, 27-07C, 32-09J, 32-09K
205	CSL	E21	Low Pressure Core Spray (LPCS)	27-05A, 32-09K
207	DER	E31	Leak Detection	32-09B
208	MSI	E33	MSIV Positive Leakage Control	27-20A
209	ICS	E51	Reactor Core Isolation Cooling	27-06A, 32-05B, 32-09J
251	FPW		Fire Protection Water & Eng Pump	15-01C
254	CPM		Hydrogen Mixing	27-21A
255	LSV		Penetration Valve Leakage Control (PVLCS)	27-20B, 27-20C, 27-20D
256	SWP		Service Water Standby (SSW)	09-10B, 09-10C, 09-10D, 09-10E, 09-10F
309	EGA		Diesel Generator Starting Air	08-09B, 08-09D
309	EGF		Diesel Generator Fuel Oil	08-09A
309	EGO		Diesel Generator Lube Oil	08-09C, 08-09D
309	EGT		Diesel Generator Cooling Water	08-09C
402	HVC		HVAC – Control Building	22-09A
403	HVR		HVAC – Containment Building	22-01A, 22-01B
410	HVK		HVAC – Chilled Water (Control Building)	22-14H, 22-14J
410	HVN		HVAC – Chilled Water (Normal)	22-14D
552	CMS		Containment Atmosphere Monitoring	33-02A, 33-02B, 33-02C
601	WCS	G33	Reactor Water Cleanup & Filter	26-03A, 26-03B, 36-01A
602	SFC		Fuel Pool Cooling	34-02A

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 15 OF 26
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System No.	System Code	GE Code	System Name	Piping Diagrams
609	DER		Equipment Drains – reactor Building	32-09B,32-09G, 32-09J
609	DFR		Floor Drains – Reactor Building	32-09A, 32-09F, 32-09J, 32-09K, 32-09P
609	DTM		Floor & Equipment Drains – Turbine Building	32-05B
610	SSR		Reactor Plant Sampling (PASS)	21-02B

SECTION 2

Inservice Test Program – ASME Code Class 1, 2 and 3 Pumps

ASME Code Class 1, 2, and 3 Pumps Subject to the Testing Requirements of ISTB

Residual Heat Removal Pumps E12-PC002A, E12-PC002B, E12-PC002C
 Residual Heat Removal Jockey Pump E12-PC003
 Low Pressure Core Spray Pump E21-PC001
 Low Pressure Jockey Pump E21-PC002
 High Pressure Core Spray Pump E22-PC001
 High Pressure Core Spray Jockey Pump E22-PC003
 Fuel Pool Cooling Pumps SFC-P1A, SFC-P1B
 Standby Service Water Pumps SWP-P2A, SWP-P2B, SWP-P2C, SWP-P2D
 Standby Liquid Control Injection Pumps C41-PC001A, C41-PC001B
 Reactor Core Isolation Cooling Pump E51-PC001
 Control Building Chilled Water Pumps HVK-P1A, HVK-P1B, HVK-P1C, HVK-P1D
 Control Building Chilled Water Recirc Pumps SWP-P3A, SWP-P3B, SWP-P3C, SWP-P3D

Program Description

The following tabulation lists the pump identification, diagram number, quality group, parameters required to be measured or observed, pump group, and the test frequency. Requests for relief (R-R) numbers have been noted in the appropriate parameter columns, if applicable.

The detailed description of the requests for relief, containing the basis for a relief and alternate testing, follows the program tabulation, if applicable.

Non Code Pumps Tested per RBS Program

Auxiliary Building Floor Drain Sump Pumps DFR-P5A, DFR-P5B, DFR-P5C, DFR-P5D

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 16 OF 26
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PUMP TABLE LEGEND

Pump Group	RBS (old)	Database Standardization (new)
Group A	A	A
Group B	B	B
N/A		N/A
Augmented		Aug
Exempt		Exempt
Skid Mounted	Skid	Skid
Pump Code Class		
ASME Class 1	1	1
ASME Class 2	2	2
ASME Class 3	3	3
Not Applicable	NA	NA
Non Code	NC	NC
Pump Type		
Centrifugal	C	C
Positive Displacement	PD	PD
Reciprocating Positive Displacement		PD
Vertical Line Shaft	VLS	VLS
Pump Driver		
Motor Driven	Motor	MTR
Turbine Driven	Turbine	TURB
Combustion Engine	Engine	ENG
Gear		GEAR
Air-motor		AM
Pump Test Type		
Discharge Pressure	Pd	Pd
Differential Pressure	dP	dP
Flow Rate	FR	Q
Speed	S	N
Skid		Skid
Vibration	V	V
Pump Test Frequency		
Cold Shutdown		CS
Operating Parameter		OP
Quarterly	Q	Q
Refueling		
Eighteen Months	18M	18M
Two Year	2Y	2Y

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 17 OF 26
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INDEX OF PUMP RELIEF REQUESTS

PUMP	QUALITY CLASS	SYSTEM	R.R. NUMBER	RELIEF FROM
SWP-P2A SWP-P2B SWP-P2C SWP-P2D	3	SSW	PRR-RBS-2017-1	Code Test
E12-PC002A E12-PC002B E12-PC002C SFC-P1A SFC-P1B HVK-P1A HVK-P1B HVK-P1C HVK-P1D SWP-P3A SWP-P3B SWP-P3C SWP-P3D E12-PC003 E21-PC002 E22-PC003 E51-PC003 E51PC-001 E21-PC001 E22-PC001	2 2 2 3 3 3 3 3 3 3 3 3 3 2 2 2 2 2 2 2	RHS RHS RHS SFC SFC HVK HVK HVK HVK SWP SWP SWP SWP RHS CSL CSH ICS ICS CSL CSH	PRR-RBS-2017-2	CPT Test Quarterly

INDEX OF PUMP POSITION STATEMENTS

PUMP	QUALITY CLASS	SYSTEM	PPS No. NUMBER	ALTERNATE TEST
DFR-P5A DFR-P5B DFR-P5D DFR-P5E	NC	DFR	PPS-001	24 month

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 18 OF 26
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SECTION 3

Inservice Test Program Summary of Valves

ASME Code Class 1, 2 and 3 Valves Subject To The Testing Requirements Of ISTC:

ISTC establishes the requirements for preservice and inservice testing to assess the operational readiness of certain valves and pressure relief devices (and their actuating and position indicating systems) used in nuclear power plants.

The active or passive valves covered are those which are required to perform a specific function in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of an accident. The pressure-relief devices covered are those for protecting systems or portions of systems which perform one or more of the three preceding functions.

ISTC establishes test intervals, parameters to be measured and evaluated, acceptance criteria, corrective action, and records requirements.

Program Description

The following tabulation lists the valve identification number by the system and drawing number of which it is a part, the component quality group, valve category per ISTC-1300, valve size and type, actuator type, normal valve position and safety position. The type of testing required, specific relief request, specific cold shutdown/refueling justification, specific valve position statements and test frequency are identified as well. Requests for relief, cold shutdown/refueling justifications and valve position statements have been noted, in the appropriate column by numeric designator. The numeric designator refers to a relief request or justification unique to a specific valve or valve set. A legend identifying the abbreviations appearing in the tabulation has been provided. The detailed description of the requests for relief, containing the basis for relief and alternate testing, follow the tabulation. A section containing Cold Shutdown, Refueling Justifications and Valve Position Statements follows the requests for relief.

Valve Test Frequency

Quarterly

Active Category A, B and C valves shall be tested nominally every 3 months and shall meet the requirements of ISTC and ASME OM Code Case OMN-20.

Cold Shutdown

The inservice valve testing program for valves required to be tested at cold shutdowns must commence no later than 48 hours after each cold shutdown and shall continue until complete or the plant is ready to commence start-up. For extended outages, testing need not commence within 48 hours, provided all valves required to be tested during Cold Shutdown will be tested prior to plant start-up. Completion of all inservice valve testing for valves required to be tested at cold shutdown is not a prerequisite to plant start-up. For unexpected/unplanned cold shutdowns i.e. non-refueling outages, any testing not completed at one cold shutdown should be performed during subsequent cold shutdowns within one operating cycle. It is expected that Operations and Outage Scheduling will expend a 'good faith' effort to perform cold shutdown testing during a short outage.

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 19 OF 26
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Refueling

Inservice testing of valves required to be tested at refueling shall be tested at each refueling and completed prior to returning the plant to operation.

Valve Position Verification

Direct observation of valve position indication has been incorporated in the following tables. The requirement will be satisfied at two year intervals. When valve position verification cannot be performed it will be accompanied by a request for relief.

Valves Subject To Leak Rate Testing

Valves subject to leak rate testing include containment isolation valves and pressure isolation valves. Containment isolation valves are those valves identified in the River Bend Station Technical Specifications, which have been determined subject to the requirements of 10 CFR 50 Appendix J. Pressure isolation valves are those valves which form a boundary of interface between the higher pressure Reactor Coolant System and a connected system designed for lower maximum pressure. Included in this category are valves forming the boundary between the Reactor Coolant System and the lower pressure Residual Heat Removal and Safety Injection Systems as specified in Technical Requirements Manual Table 3.4.6.1-1.

Containment isolation valves (CIV) are leak rate tested in accordance with the requirements of 10 CFR 50 Appendix J. Pressure isolation valves (PIV) are tested in accordance with ISTC requirements, at function differential pressure or at reduced pressure adjusted to function differential pressure. Valves which have seat leakage requirements but are not CIV or PIV tested are also tested in accordance with ISTC requirements.

CR-RBS-2017-03403 and CR-RBS-2017-05457

E22-MOVF001
E22-VF002
E51-MOVF010

These valves have been evaluated and RBS determined they are not to be leak tested as Category A Valves.

Check Valve Testing

Non-intrusive techniques may be utilized for verification of check valve obturator position. Disassembly and inspection may be used to confirm the non-intrusive test results, or as the primary test method when non-intrusive techniques are found not to be adequate for a particular valve.

VALVE TABLE LEGEND**KEY TO VALVE TYPES**

Valve Code Class	RBS (old)	Database Standardization (new)
ASME Class 1	1	1
ASME Class 2	2	2
ASME Class 3	3	3
Not Applicable		NA
Non Code	NC	NC
Valve Category		
A - Seat Leakage Limited	A	A
A/C Both Categories A and C	C, A	A/C
B - Seat Leakage Not Required	B	B
B/C - Both Categories B and C	C, B	B/C
C - Self Actuating Valves	C	C
D - Single Use Valves	D	D
N/A = included as a Commitment		N/A
Valve Type		
Air release		AR
Angle		ANG
Ball	BA	BA
Butterfly	B	BF
Check	C	CK
Clevis		CL
Diaphragm		DIA
Gate	G	GA
Globe	GL	GL
Needle		NDL
Plug		PLG
Pressure Control		PCV
Relief or Safety	RV	RV
Rupture Disk	RD	RD
Shear Plug (explosive actuated)	X	XA
Sluice Gate		SG
Stop Check	SC	SCK
Temperature control		TC
Three-way		3W
Vacuum Relief		VRV

KEY TO TESTING FREQUENCY

Frequency	RBS (old)	Database Standardization (new)
Appendix J	J	AppJ
Cold Shutdown	C	CS
Condition Monitoring		CM
Disassembly and Inspection Program Frequency		DIF
Every 10 years	10Y	10Y
Every 2 years	2Y	2Y
Every 5 years	5Y	5Y
Every 6 years		6Y
Every 18 Months	18M	18M
Normal Operation		NO
Per the MOV Program		MOV
Quarterly	Q	Q
Refueling Outage	R	R
Skid Mounted		SK
Technical Specification		TS
Variable		V

KEY TO ACTUATOR TYPES

Actuator Type	RBS (old)	Database Standardization (new)
Air	A	AO
Explosive charge	EXP	EXP
Hand (manual)	H	H
Hydraulic	E/H	HO
Hydraulic/pneumatic		HP
Motor	M	MO
Self (system) actuated	SA	SA
Solenoid	S	SO

KEY TO VALVE POSITIONS

Normal Position	RBS (old)	Database Standardization (new)
Closed	C	C
Locked Closed		LC
Locked Open		LO
Open	O	O
Open or Closed	O/C	O/C
System Condition Dependent		SYS
Throttled		TH
Safety Position		
Closed	C	C
Locked Closed		LC
Locked Open		LO
Locked Throttled		LT
No Safety Related Position		N/A
Open	O	O
Open and Closed	O/C	O/C
Throttled		TH
Fail Position		
Closed		C
Fail As-is		FAI
Open		O
No Safety Related Position		N/A

KEY TO TEST TYPES

Valve Test Type	Database Standardization (new)
Check Valve Bi-directional Closed	BDC
Check Valve Bi-directional Open	BDO
Check Valve Close	CVC
Check Valve Open	CVO
Check Valve Partial Stroke Test	CVP
Condition Monitoring	CM
Diagnostic Test	DIAG
Disassembly & Inspect	D&I
Exercise Test Closed	ETC
Exercise Test Open	ETO
Explosive Test	EXP
Fail Safe Closed (P/F)	FSC
Fail Safe Closed	FSC
Fail Safe Open (P/F)	FSO
Fail Safe Open	FSO
Leak Rate Test App J	LTJ
Leak Rate Test App J (P/F)	LTJ
Leak Rate Test	LT
Leak Rate Test (P/F)	LT
Leak Rate Test PIV	LT-PIV
Leak Rate Test CIV	LT-CIV
Partial Stroke Close	PSC
Partial Stroke Open	PSO
Partial Stroke Exercise	PSE
Position Indication Test	RPI
Relief Valve Test	RV
Relief Valve Setpoint	RV-SET
Rupture Disk	RD
Stroke Time Closed	STC
Stroke Time Open	STO

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 24 OF 26
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INDEX OF VALVE RELIEF REQUESTS

VALVE	QUALITY CLASS	SYSTEM	R.R. NUMBER	RELIEF FROM
B21-RVF041A, B, C, D, F, G, L B21-RVF047A, B, C, D, F B21-RVF051B, C, D, G	1	MSS	VRR-RBS-2017-1	5 year interval

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 25 OF 26
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INDEX OF COLD SHUTDOWN/REFUELING JUSTIFICATIONS

VALVE	SYSTEM	JUSTIFICATION NUMBER	ALTERNATE FREQUENCY
FWS-MOV7A, B	FWS	CSJ-001	CS
B21-MOVF098A, B, C, D	MSS	CSJ-002	CS
IAS-MOV106	IAS	CSJ-003	CS
CCP-MOV138 CCP-MOV142 CCP-MOV143 CCP-MOV144 CCP-MOV158 CCP-MOV159	CCP	CSJ-004	CS
E12-MOVF008 E12-MOVF009 E12-MOVF042A, B, C E12-MOVF053A, B E21-MOVF005 E22-MOVF004 E51-MOVF013	RHS CSL CSH ICS	CSJ-005	CS
B21-AOVF022A, B, C, D B21-AOVF028A, B, C, D	MSS	CSJ-006	CS
G33-MOVF001 G33-MOVF004 G33-MOVF039 G33-MOVF040 G33-MOVF053 G33-MOVF054	WCS	CSJ-007	CS
E51-MOVF063 E51-MOVF064 E51-MOVF076	ICS	CSJ-008	CS
SWP-MOV57A, B	SWP	CSJ-009	CS
CPM-MOV1A, B CPM-MOV2A, B CPM-MOV3A, B CPM-MOV4A, B	CPM	CSJ-010	CS
SWP-MOV502A, B SWP-MOV503A, B SWP-MOV504A, B SWP-MOV510A, B	SWP	CSJ-011	CS
C41-MOVF001A, B	SLS	CSJ-012	CS
HVK-MOV11A, B	HVK	CSJ-013	CS

RBS IST PLAN	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION: 9 PAGE: 26 OF 26
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VALVE	SYSTEM	JUSTIFICATION NUMBER	ALTERNATE FREQUENCY
SWP-V147 SWP-V148 SWP-V149 SWP-V150	SSW	CS-017	CS
C11-MOVF083	RDS	ROJ-001	R
B21-AOVF032A B21-AOVF032B B21-AOVF010A B21-AOVF010B	FWS	ROJ-003	RO
B21-VF036A, F, G, J, L, M, N, P, R B21-VF039B, C, D, E, H, K, S	SVV	ROJ-004	R
DFR-V181 DFR-V182	DER	ROJ-005	24 M
E12-AOVF041A, B, C E21-AOVF006 E22-AOVF005	RHS CSL CSH	ROJ-006	R
FWS-V3052	FWS	ROJ-007	R
RHS-V240	RHS	ROJ-008	R
SSR-SOV133 SSR-SOV134 SSR-SOV135	SSR	VPS-003	2Y - LT

INDEX OF AUGMENTED VALVE POSITION STATEMENTS

VALVE	SYSTEM	JUSTIFICATION NUMBER	ALTERNATE FREQUENCY
DFR-AOV144 DFR-AOV145	DFR	VPS-004	24 months
F42-MOVF003	SFT	VPS-005	Prior to use / 24 months
DFR-V130 DFR-V131 DFR-V140 DFR-V141	DER	VPS-006	24 M

Pump Summary Listing - Standard Code ISTB Pumps

Page 1 of 7

PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
C41-PC001A	STANDBY LIQUID CONTROL PUMP 1A	27-16A	B	2	Positive Displacement	Fixed	LT600	Pd Q V Pd Q	2Y 2Y 2Y Q Q	STP-201-6310 STP-201-6310 STP-201-6310 STP-201-6310 STP-201-6310	
C41-PC001B	STANDBY LIQUID CONTROL PUMP 1B	27-16A	B	2	Positive Displacement	Fixed	LT600	Pd Q V Pd Q	2Y 2Y 2Y Q Q	STP-201-6310 STP-201-6310 STP-201-6310 STP-201-6310 STP-201-6310	
E12-PC002A	RESIDUAL HEAT REMOVAL PUMP 2A	27-07A	A	2	Vertical Line Shaft	Fixed	GE600	dP Q V	Q Q Q	STP-204-6301 STP-204-6301 STP-204-6301	PRR-RBS-2017-2 PRR-RBS-2017-2 PRR-RBS-2017-2
E12-PC002B	RESIDUAL HEAT REMOVAL PUMP 2B	27-07B	A	2	Vertical Line Shaft	Fixed	GE600	dP Q V	Q Q Q	STP-204-6302 STP-204-6302 STP-204-6302	PRR-RBS-2017-2 PRR-RBS-2017-2 PRR-RBS-2017-2

Pump Summary Listing - Standard Code ISTB Pumps

Page 2 of 7

PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
E12-PC002C	RESIDUAL HEAT REMOVAL PUMP 2C	27-07C	B	2	Vertical Line Shaft	Fixed	GE600	dP	Q	STP-204-6302	PRR-RBS-2017-2
								Q	Q	STP-204-6302	PRR-RBS-2017-2
								V	Q	STP-204-6302	PRR-RBS-2017-2
E12-PC003	RESIDUAL HEAT REMOVAL PUMP DISCHARGE LINE FILL PUMP	27-07C	A	2	Centrifugal	Fixed	GE600	dP	Q	STP-204-6302	PRR-RBS-2017-2
								Q	Q	STP-204-6302	PRR-RBS-2017-2
								V	Q	STP-204-6302	PRR-RBS-2017-2
E21-PC001	LOW PRESSURE CORE SPRAY PUMP	27-05A	B	2	Vertical Line Shaft	Fixed	GE600	dP	Q	STP-205-6301	PRR-RBS-2017-2
								Q	Q	STP-205-6301	PRR-RBS-2017-2
								V	Q	STP-205-6301	PRR-RBS-2017-2
E21-PC002	LOW PRESSURE CORE SPRAY PUMP DISCHARGE LINE FILL PUMP	27-05A	A	2	Centrifugal	Fixed	GE600	dP	Q	STP-205-6301	PRR-RBS-2017-2
								Q	Q	STP-205-6301	PRR-RBS-2017-2
								V	Q	STP-205-6301	PRR-RBS-2017-2

Pump Summary Listing - Standard Code ISTB Pumps

Page 3 of 7

PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
E22-PC001	HIGH PRESSURE CORE SPRAY PUMP	27-04A	B	2	Vertical Line Shaft	Fixed	GE600	dP	Q	STP-203-6305	PRR-RBS-2017-2
								Q	Q	STP-203-6305	PRR-RBS-2017-2
								V	Q	STP-203-6305	PRR-RBS-2017-2
E22-PC003	HPCS PUMP DISCHARGE LINE FILL PUMP	27-04A	A	2	Centrifugal	Fixed	GE600	dP	Q	STP-203-6305	PRR-RBS-2017-2
								Q	Q	STP-203-6305	PRR-RBS-2017-2
								V	Q	STP-203-6305	PRR-RBS-2017-2
E51-PC001	REACTOR CORE ISOL COOLING PUMP	27-06A	B	2	Centrifugal	Var	GE600	dP	Q	STP-209-6310	PRR-RBS-2017-2
								N	Q	STP-209-6310	
								Q	Q	STP-209-6310	PRR-RBS-2017-2
								V	Q	STP-209-6310	PRR-RBS-2017-2
E51-PC003	REACTOR CORE ISOL COOLING SUB SYSTEM FILL PUMP	27-06A	A	2	Centrifugal	Fixed	GE600	dP	Q	STP-209-6310	PRR-RBS-2017-2
								Q	Q	STP-209-6310	PRR-RBS-2017-2
								V	Q	STP-209-6310	PRR-RBS-2017-2

Pump Summary Listing - Standard Code ISTB Pumps

Page 4 of 7

PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
HVK-P1A	CONTROL BLDG CHILLED WATER PUMP 1A	22-14J	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-410-6311	PRR-RBS-2017-2
								Q	Q	STP-410-6311	PRR-RBS-2017-2
								V	Q	STP-410-6311	PRR-RBS-2017-2
HVK-P1B	CONTROL BLDG CHILLED WATER PUMP 1B	22-14H	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-410-6312	PRR-RBS-2017-2
								Q	Q	STP-410-6312	PRR-RBS-2017-2
								V	Q	STP-410-6312	PRR-RBS-2017-2
HVK-P1C	CONTROL BLDG CHILLED WATER PUMP 1C	22-14J	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-410-6311	PRR-RBS-2017-2
								Q	Q	STP-410-6311	PRR-RBS-2017-2
								V	Q	STP-410-6311	PRR-RBS-2017-2
HVK-P1D	CONTROL BLDG CHILLED WATER PUMP 1D	22-14H	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-410-6312	PRR-RBS-2017-2
								Q	Q	STP-410-6312	PRR-RBS-2017-2
								V	Q	STP-410-6312	PRR-RBS-2017-2
SFC-P1A	FUEL POOL COOLING PUMP A	34-02A	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-602-6311	PRR-RBS-2017-2
								Q	Q	STP-602-6311	PRR-RBS-2017-2
								V	Q	STP-602-6311	PRR-RBS-2017-2

Pump Summary Listing - Standard Code ISTB Pumps

Page 5 of 7

PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
SFC-P1B	FUEL POOL COOLING PUMP B	34-02A	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-602-6312	PRR-RBS-2017-2
								Q	Q	STP-602-6312	PRR-RBS-2017-2
								V	Q	STP-602-6312	PRR-RBS-2017-2
SWP-P2A	STANDBY SERVICE WATER PUMP A	09-10E	B	3	Vertical Line Shaft	Fixed	GE600	V	2Y	STP-256-6303	PRR-RBS-2017-1
								dP	2Y	STP-256-6303	
								Q	2Y	STP-256-6303	
								dP	Q	STP-256-6303	
								Q	Q	STP-256-6303	
SWP-P2B	STANDBY SERVICE WATER PUMP B	09-10E	B	3	Vertical Line Shaft	Fixed	GE600	V	2Y	STP-256-6304	PRR-RBS-2017-1
								dP	2Y	STP-256-6304	
								Q	2Y	STP-256-6304	
								dP	Q	STP-256-6304	
								Q	Q	STP-256-6304	
SWP-P2C	STANDBY SERVICE WATER PUMP C	09-10E	B	3	Vertical Line Shaft	Fixed	GE600	V	2Y	STP-256-6303	PRR-RBS-2017-1
								dP	2Y	STP-256-6303	
								Q	2Y	STP-256-6303	
								dP	Q	STP-256-6303	
								Q	Q	STP-256-6303	

Pump Summary Listing - Standard Code ISTB Pumps

Page 6 of 7

PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
SWP-P2D	STANDBY SERVICE WATER PUMP D	09-10E	B	3	Vertical Line Shaft	Fixed	GE600	V	2Y	STP-256-6304	PRR-RBS-2017-1
								dP	2Y	STP-256-6304	
								Q	2Y	STP-256-6304	
								dP	Q	STP-256-6304	
								Q	Q	STP-256-6304	
SWP-P3A	CNTRL BLDG CHILLED WATER RECIRC PUMP A	09-10B	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-256-6321	PRR-RBS-2017-2
								Q	Q	STP-256-6321	PRR-RBS-2017-2
								V	Q	STP-256-6321	PRR-RBS-2017-2
SWP-P3B	CNTRL BLDG CHILLED WATER RECIRC PUMP B	09-10B	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-256-6322	PRR-RBS-2017-2
								Q	Q	STP-256-6322	PRR-RBS-2017-2
								V	Q	STP-256-6322	PRR-RBS-2017-2
SWP-P3C	CNTRL BLDG CHILLED WATER RECIRC PUMP C	09-10B	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-256-6321	PRR-RBS-2017-2
								Q	Q	STP-256-6321	PRR-RBS-2017-2
								V	Q	STP-256-6321	PRR-RBS-2017-2

Pump Summary Listing - Standard Code ISTB Pumps

Page 7 of 7

PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
SWP-P3D	CNTRL BLDG CHILLED WATER RECIRC PUMP D	09-10B	A	3	Centrifugal	Fixed	GE600	dP	Q	STP-256-6322	PRR-RBS- 2017-2
								Q	Q	STP-256-6322	PRR-RBS- 2017-2
								V	Q	STP-256-6322	PRR-RBS- 2017-2

Pump Summary Listing - Augmented Pumps

Page 1 of 1

PUMP ID	FUNCTION	DRAWING/COOR	GROUP	CLASS	TYPE	FIXED OR VAR.	ACTUAL SPEED	TEST REQ	FREQ	PROCEDURE	NOTES
DFR-P5A	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5A	32-09P / B-16	AUG-B	NC	Centrifugal	Fixed	GE600	Q	2Y	STP-609-6603	PPS-001
DFR-P5B	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5B	32-09P / K-06	AUG-B	NC	Centrifugal	Fixed	GE600	Q	2Y	STP-609-6603	PPS-001
DFR-P5D	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5D	32-09P / B-15	AUG-B	NC	Centrifugal	Fixed	GE600	Q	2Y	STP-609-6603	PPS-001
DFR-P5E	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5E	32-09P / K-05	AUG-B	NC	Centrifugal	Fixed	GE600	Q	2Y	STP-609-6603	PPS-001

PPS-001

SYSTEM: 609 - DFR - FLOOR DRAINS - REACTOR BUILDING

GE CODE: N/A

Component ID	Code Class	Category	Description
DFR-P5A	NC	Aug-B	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5A
DFR-P5B	NC	Aug-B	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5B
DFR-P5D	NC	Aug-B	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5D
DFR-P5E	NC	Aug-B	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5E

TEST REQUIREMENT:

Pump testing in accordance with the Code

ALTERNATE TESTING:

A functional test of each crescent area sump pump will be performed once every 24 months in accordance with TRM Surveillance Requirement TSR 3.5.4.1.

BASIS:

The above listed pumps are safety-related, non-ASME pumps. They were not designed and constructed in accordance with ASME Section III and are not required to be tested in accordance with the requirements of the Code as delineated in 10CFR50.55a.

10CFR50, Appendix A, General Design Criterion - 1 and 10CFR50, Appendix B, Criterion XI, require that components 'important to safety' be tested commensurate with the required safety function. These pumps are tested commensurate with their safety function in accordance with TSR 3.5.4.1

REFERENCES:

NUREG-1482, Section 2.2

APPROVAL:

These components are non-ASME. NRC approval is not required per NUREG-1482.

RBS, River Bend Station
10 CFR 50.55a Relief Request Number PRR-RBS-2017-1
Proposed Alternative In Accordance with 10 CFR 50.55a(z)(2) Hardship Without a Compensating Increase in
Quality and Safety

1. **American Society of Mechanical Engineers (ASME) Code Component(s) Affected**

<u>Pump ID</u>	<u>Function</u>	<u>Category</u>	<u>Class</u>
SWP-P2A	STANDBY SERVICE WATER PUMP A	Group A	3
SWP-P2B	STANDBY SERVICE WATER PUMP B	Group A	3
SWP-P2C	STANDBY SERVICE WATER PUMP C	Group A	3
SWP-P2D	STANDBY SERVICE WATER PUMP D	Group A	3

2. **Applicable ASME Code Edition and Addenda**

ASME OM Code-2004 Edition, with Addenda through and including ASME OM Code-2006.

3. **Applicable Code Requirement(s)**

ASME OM Code 2004 Edition with addenda through OM Code 2006 Addenda ISTB-3540(b) requires that vibration measurements on vertical line shaft pumps be taken on the upper motor-bearing housing in three orthogonal directions, one of which is in the axial direction.

4. **Reason for Request**

Pursuant to 10 CFR 50.55a, "Codes and Standards", paragraph (z)(2), an alternative is requested when using the requirements of ASME OM Code-2004 Edition with addenda through OM Code-2006 Addenda ISTB (as listed above).

This alternative is a re-submittal of NRC approved 2nd Interval PRR-006 that was based on the ASME OM Code 1987 Edition with addenda through OMa-1988. The 3rd Interval alternative request PRR-RBS-2007-1 was based on the ASME OM Code-2001 Edition with addenda through OM Code-2003 Addenda. This re-submittal is an alternative based on the ASME OM Code-2004 Edition with addenda through OM Code-2006 Addenda. There have been no substantive changes to this alternative, to the OM Code requirements or to the basis for use, which would alter the previous NRC Safety Evaluation conclusions.

The Code-required vibration measurements on the upper motor bearing housing on these vertical line shaft pumps are impractical because the standby service water pump motors are totally enclosed, weather-proof induction motors that are equipped with housing covers which completely enshroud the upper motor bearing housing. The housing cover precludes vibration measurements from being taken directly on the upper bearing housing.

RBS, River Bend Station
10 CFR 50.55a Relief Request Number PRR-RBS-2017-1
Proposed Alternative In Accordance with 10 CFR 50.55a(z)(2) Hardship Without a Compensating Increase in
Quality and Safety

5. Proposed Alternative and Basis for Use

Vibration measurements will be taken in three orthogonal directions in a location that provides valid indication of motor vibratory motion in close proximity of the upper motor bearing housing.

On the standby service water pumps the upper bearing measurements will be taken at the lifting lug that is integral to the motor stator housing. The lifting lug is structurally rigid and provides transmissibility of the motor vibratory motion. The vibration measurements will be taken in three orthogonal directions on the lifting lug. This location has demonstrated the ability to provide repeatable vibration data and will provide readings that are at least as representative of pump mechanical condition as those required by the ASME OM Code-2004 Edition with addenda through OMB Code-2006 Addenda. Therefore, application of the ASME OM Code-2004 Edition with addenda through OMB Code-2006 Addenda hydraulic testing criteria along with radial and axial vibration monitoring on the lifting lug should provide adequate data for assessing the condition of the subject pumps and for monitoring for degradation.

The above proposed alternative provides reasonable assurance of the operational readiness since vibration measurements will be taken in three orthogonal directions on the lifting lug. These readings will provide information as to the mechanical integrity of the pumps.

Based on the determination that compliance with the ASME OM Code-2004 Edition with addenda through OMB Code-2006 Addenda requirements results in a hardship without a compensating increase in the level of quality or safety, this proposed alternative should be granted pursuant to 10 CFR 50.55a(z)(2).

6. Duration of proposed Alternative

This relief is requested for the fourth ten year IST interval, which begins December 2, 2017 and is scheduled to end on December 1, 2027.

7. Precedent

Use of an alternative for similar requirements was previously granted as PRR-006 for River Bend's 2nd 120-month Inservice Testing Interval (TAC-No. M97705).

Use of an alternative was also granted as PRR-RBS-2007-1 for River Bend's 3rd 120-month Inservice Testing Interval (RBC-50599)

The NRC approved this Relief Request by letter dated 5/24/2017.

RBS, River Bend Station
10 CFR 50.55a Relief Request Number PRR-RBS-2017-2
Proposed Alternative In Accordance with 10 CFR 50.55a(z)(1) Acceptable Level of Quality and Safety

1. American Society of Mechanical Engineers (ASME) Code Component(s) Affected

<u>Pump ID</u>	<u>Function</u>	<u>Category</u>	<u>Class</u>
E12-PC002A	RESIDUAL HEAT REMOVAL PUMP 2A	Group A	2
E12-PC002B	RESIDUAL HEAT REMOVAL PUMP 2B	Group A	2
E12-PC002C	RESIDUAL HEAT REMOVAL PUMP 2C	Group B	2
SFC-P1A	FUEL POOL COOLING PUMP A	Group A	3
SFC-P1B	FUEL POOL COOLING PUMP B	Group A	3
HVK-P1A	CONTROL BLDG CHILLED WATER PUMP 1A	Group A	3
HVK-P1B	CONTROL BLDG CHILLED WATER PUMP 1B	Group A	3
HVK-P1C	CONTROL BLDG CHILLED WATER PUMP 1C	Group A	3
HVK-P1D	CONTROL BLDG CHILLED WATER PUMP 1D	Group A	3
SWP-P3A	CNTRL BLDG CHILLED WATER RECIRC PUMP A	Group A	3
SWP-P3B	CNTRL BLDG CHILLED WATER RECIRC PUMP B	Group A	3
SWP-P3C	CNTRL BLDG CHILLED WATER RECIRC PUMP C	Group A	3
SWP-P3D	CNTRL BLDG CHILLED WATER RECIRC PUMP D	Group A	3
E12-PC003	RESIDUAL HEAT REMOVAL PUMP DISCHARGE LINE FILL PUMP	Group A	2
E21-PC002	LOW PRESSURE CORE SPRAY PUMP DISCHARGE LINE FILL PUMP	Group A	2
E22-PC003	HPCS PUMP DISCHARGE LINE FILL PUMP	Group A	2
E51-PC003	REACTOR CORE ISOL COOLING SUB SYSTEM FILL PUMP	Group A	2
E51-PC001	REACTOR CORE ISOL COOLING PUMP	Group B	2
E21-PC001	LOW PRESSURE CORE SPRAY PUMP	Group B	2
E22-PC001	HIGH PRESSURE CORE SPRAY PUMP	Group B	2

2. Applicable ASME Code Edition and Addenda

ASME OM Code-2004 Edition, with Addenda through and including ASME OMb Code-2006.

3. Applicable Code Requirement(s)

Table ISTB-3000-1, "Inservice Test Parameters"

Table ISTB-3400-1, "Inservice Test Frequency"

Table ISTB-3510-1, "Require Instrument Accuracy"

Table ISTB-5121-1, "Centrifugal Pump Test Acceptance Criteria"

RBS, River Bend Station
10 CFR 50.55a Relief Request Number PRR-RBS-2017-2
Proposed Alternative In Accordance with 10 CFR 50.55a(z)(1) Acceptable Level of Quality and Safety

ISTB-5123, "Comprehensive Test Procedure". Comprehensive tests shall be conducted with the pump operating at a specified reference point. The test parameters shown in Table ISTB-3000-1 shall be determined and recorded as required by this paragraph.

4. Reason for Request

Pursuant to 10 CFR 50.55a, "Codes and Standards", paragraph (z)(2), an alternative is requested when using the requirements of ASME OM Code-2004 Edition with addenda through OM Code-2006 Addenda ISTB (as listed above).

The ASME OM Code Committee has approved Code Case OMN-18, "Alternative Testing Requirements for Pumps Tested Quarterly with +/- 20% of Design Flow," which allows owners to perform a Group A test in lieu of the Comprehensive Pump Test (CPT) if the Group A test is conducted at +/- 20% of the design flow rate and uses pressure instruments that meet the CPT accuracy requirements (+/- 1/2%). This Code Case was not reviewed for approval in Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code", Revision 1, August 2014. However, the OM Code Case OMN-18 is listed in Draft Regulatory Guide DG-1297 (Proposed Revision 2 to Regulatory Guide 1.192, dated March 2016), "Operation and Maintenance Code Case Applicability, ASME OM Code". River Bend Station is scheduled to enter their 4th 10 Year Interval on December 1, 2017, at which time Revision 2 of Regulatory Guide 1.192 will be approved through Rulemaking (scheduled for March 1, 2017) and River Bend Station will apply the condition for use of OMN-18 as currently listed in DG-1297.

The basis for this change is that a quarterly Group A pump test, performed at the CPT flow rate provides more consistent data for trending than a Group A test in conjunction with a biennial CPT. The increased requirements imposed by the proposed alternative on the parameters to be monitored during every quarterly pump test and the more accurate instruments allow River Bend Station to perform better trending of pump performance data due to the more consistent requirements for each of the quarterly tests. Also, combined with more trending information since the pump is tested quarterly, the overall performance is monitored more consistently.

5. Proposed Alternative and Basis for Use

River Bend Station proposes that in lieu of the CPT requirements of Table ISTB-3400-1, Group A tests will be performed quarterly within +/- 20 percent of the pump design flow rate, with pressure measuring instrumentation meeting the (+/- 1/2%) instrument accuracy requirements of Table ISTB-3510-1 specified for the biennial Comprehensive Test. In addition, River Bend Station has elected to restrict the upper limit for differential pressure to 6%, in accordance with the proposed Condition imposed within proposed Revision 2 of Regulatory Guide 1.192. The upper end values of the Group A Test Acceptance Ranges for flow and differential pressure (or discharge pressure) will be 1.06Q_r and 1.06ΔP_r,

RBS, River Bend Station
10 CFR 50.55a Relief Request Number PRR-RBS-2017-2
Proposed Alternative In Accordance with 10 CFR 50.55a(z)(1) Acceptable Level of Quality and Safety

respectively, as applicable to the pump type. The high values of the Required Action Ranges for flow and differential pressure (or discharge pressure) will be $>1.06Q_r$ and $1.06\Delta P_r$, respectively, as applicable to the pump type. This condition would continue once Revision 2 of Regulatory Guide 1.192 is issued in 2017. River Bend Station will use OMN-18, as published in the 2012 Edition, which is also based on the listing within proposed Revision 2 of Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code".

Vibration testing will continue to be performed under the proposed modified Group A test and the acceptance criteria for vibration will be the same as required for the Group A tests as shown in Table ISTB-5100-1.

Using the provisions of this relief request as an alternative to those specified in ISTB-5123 will provide adequate indication of pump performance, permit consistent detection of component degradation, and continue to provide an acceptable level of quality and safety.

Therefore, pursuant to 10 CFR 50.55a(z)(1), River Bend Station requests relief from the specific ISTB requirements identified in this request.

6. Duration of proposed Alternative

This relief is requested for the fourth ten year IST interval, which begins December 2, 2017 and is scheduled to end on December 1, 2027.

7. Precedent

Use of an alternative was granted to Perry Nuclear Power Plant, Unit 1, Relief Request PR-3 for the 3rd 10-Year Interval Pump and Valve Inservice Testing Program (TAC No. ME0820) (ML092640690)

Use of an alternative was granted to St. Lucie Unit Nos. 1 and 2, Relief From the Requirements of the ASME Code, Relief Request No. 9 (TAC No. ME5190 and ME5191) (ML11143A077)

Use of an alternative was granted to South Texas Project, Units 1 and 2, Relief Requests No. VRR-01, PRR-01, PRR-02 and PRR-03 for the Third 10-Year Inservice Testing Program Interval (TAC No. ME3515, ME3516, ME3517, ME3518, ME3519, ME3520, ME3521, and ME3522) (ML10215077)

Use of an alternative was granted to PSEG Salem Nuclear Generating Station (Salem), Unit Nos. 1 and 2, (TAC NOS. ME7938 and ME7939) (ML 12185A162) July 11, 2012.

The NRC approved this Relief Request by letter dated 5/24/2017.

Valve Summary Listing - Standard Code ISTC Valves

Page 1 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-AOVF022A	MAIN STEAM LINE INBOARD ISOLATION VALVE A	03-01A / D-16	A	ACT	1	24	GL	AO	O	C	C	LT	2Y	STP-208-3601	CSJ-006
												RPI	2Y	STP-109-6802	
												LTJ	AppJ	STP-208-3601	
												ETC	CS	STP-109-6802	
												FSC	CS	STP-109-6802	
												STC	CS	STP-109-6802	
												PSC	Q	STP-109-6302	
B21-AOVF022B	MAIN STEAM LINE INBOARD ISOLATION VALVE B	03-01A / N-05	A	ACT	1	24	GL	AO	O	C	C	LT	2Y	STP-208-3602	CSJ-006
												RPI	2Y	STP-109-6802	
												LTJ	AppJ	STP-208-3602	
												ETC	CS	STP-109-6802	
												FSC	CS	STP-109-6802	
												STC	CS	STP-109-6802	
												PSC	Q	STP-109-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 2 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-AOVF022C	MAIN STEAM LINE INBOARD ISOLATION VALVE C	03-01A / N-16	A	ACT	1	24	GL	AO	O	C	C	LT	2Y	STP-208-3603	CSJ-006
												RPI	2Y	STP-109-6802	
												LTJ	AppJ	STP-208-3603	
												ETC	CS	STP-109-6802	
												FSC	CS	STP-109-6802	
												STC	CS	STP-109-6802	
												PSC	Q	STP-109-6302	
B21-AOVF022D	MAIN STEAM LINE INBOARD ISOLATION VALVE D	03-01A / E-05	A	ACT	1	24	GL	AO	O	C	C	LT	2Y	STP-208-3604	CSJ-006
												RPI	2Y	STP-109-6802	
												LTJ	AppJ	STP-208-3604	
												ETC	CS	STP-109-6802	
												FSC	CS	STP-109-6802	
												STC	CS	STP-109-6802	
												PSC	Q	STP-109-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 3 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-AOVF028A	MAIN STEAM LINE A OUTBOARD ISOLATION VALVE	03-01C / J-16	A	ACT	1	24	GL	AO	O	C	C	LT	2Y	STP-208-3606	CSJ-006
												RPI	2Y	STP-109-6802	
												LTJ	AppJ	STP-208-3601	
												ETC	CS	STP-109-6802	
												FSC	CS	STP-109-6802	
												STC	CS	STP-109-6802	
												PSC	Q	STP-109-6302	
B21-AOVF028B	MAIN STEAM LINE B OUTBOARD ISOLATION VALVE	03-01C / M-16	A	ACT	1	24	GL	AO	O	C	C	LT	2Y	STP-208-3606	CSJ-006
												RPI	2Y	STP-109-6802	
												LTJ	AppJ	STP-208-3602	
												ETC	CS	STP-109-6802	
												FSC	CS	STP-109-6802	
												STC	CS	STP-109-6802	
												PSC	Q	STP-109-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 4 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-AOVF028C	MAIN STEAM LINE C OUTBOARD ISOLATION VALVE	03-01C / G-16	A	ACT	1	24	GL	AO	O	C	C	LT	2Y	STP-208-3606	CSJ-006
												RPI	2Y	STP-109-6802	
												LTJ	AppJ	STP-208-3603	
												ETC	CS	STP-109-6802	
												FSC	CS	STP-109-6802	
												STC	CS	STP-109-6802	
												PSC	Q	STP-109-6302	
B21-AOVF028D	MAIN STEAM LINE D OUTBOARD ISOLATION VALVE	03-01C / L-16	A	ACT	1	24	GL	AO	O	C	C	LT	2Y	STP-208-3606	CSJ-006
												RPI	2Y	STP-109-6802	
												LTJ	AppJ	STP-208-3604	
												ETC	CS	STP-109-6802	
												FSC	CS	STP-109-6802	
												STC	CS	STP-109-6802	
												PSC	Q	STP-109-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 5 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-AOVF032A	REACTOR FEEDWATER INLET HEADER A OUTBOARD AIR OPERATED CHECK VALVE	06-01B / J-12	A/C	ACT	1	20	CK	SA	O	O/C	N/A	LTJ	AppJ	STP-107-3806	
												CVC	R	STP-107-3806	ROJ-003
												CVO	R	STP-000-6501	ROJ-003
B21-AOVF032B	REACTOR FEEDWATER INLET HEADER B OUTBOARD AIR OPERATED CHECK VALVE	06-01B / N-15	A/C	ACT	1	20	CK	SA	O	O/C	N/A	LTJ	AppJ	STP-107-3807	
												CVC	R	STP-107-3807	ROJ-003
												CVO	R	STP-000-6501	ROJ-003
B21-MOVF001	REACTOR VESSEL HEAD VENT VALVE	03-01A / G-13	B	PASS	1	2	GL	MO	C	C	FAI	RPI	2Y	STP-109-6602	
B21-MOVF002	REACTOR VESSEL HEAD VENT VALVE	03-01A / G-13	B	PASS	1	2	GL	MO	C	C	FAI	RPI	2Y	STP-109-6602	
B21-MOVF016	MAIN STEAM LINE WARM UP HEADER INBOARD CONTAINMENT ISOLATION VALVE	32-05B / D-12	A	ACT	1	3	GA	MO	O	C	FAI	RPI	2Y	STP-109-6601	
												LTJ	AppJ	STP-208-3605	
												ETC	Q	STP-109-6301	
												STC	Q	STP-109-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 6 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-MOVF019	MAIN STEAM LINE OUTBOARD DRAIN ISOLATION VALVE	32-05B / D-10	A	ACT	1	3	GA	MO	O	C	FAI	LT RPI LTJ ETC STC	2Y 2Y AppJ Q Q	STP-208-3605 STP-109-6601 STP-208-3605 STP-109-6301 STP-109-6301	
B21- MOVF027A	INBOARD MSIV A STEM LEAK-OFF LINE ISOLATION VALVE	27-20A / K-13	B	PASS	2	0.75	GL	MO	O	O	FAI	RPI	2Y	STP-109-6801	
B21- MOVF027B	INBOARD MSIV B STEM LEAK-OFF LINE ISOLATION VALVE	27-20A / K-14	B	PASS	2	0.75	GL	MO	O	O	FAI	RPI	2Y	STP-109-6801	
B21- MOVF027C	INBOARD MSIV C STEM LEAK-OFF LINE ISOLATION VALVE	27-20A / K-13	B	PASS	2	0.75	GL	MO	O	O	FAI	RPI	2Y	STP-109-6801	
B21- MOVF027D	INBOARD MSIV D STEM LEAK-OFF LINE ISOLATION VALVE	27-20A / K-14	B	PASS	2	0.75	GL	MO	O	O	FAI	RPI	2Y	STP-109-6801	
B21- MOVF067A	MAIN STEAM DRAIN LINE OUTBOARD CONTAINMENT ISOLATION VALVE A	32-05B / K-14	A	ACT	1	1.5	GL	MO	O	C	FAI	RPI LTJ ETC STC	2Y AppJ Q Q	STP-109-6601 STP-208-3601 STP-109-6301 STP-109-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 7 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAI				
B21- MOV067B	MAIN STEAM DRAIN LINE OUTBOARD CONTAINMENT ISOLATION VALVE B	32-05B / K-19	A	ACT	1	1.5	GL	MO	O	C	FAI	RPI	2Y	STP-109-6601	
												LTJ	AppJ	STP-208-3602	
												ETC	Q	STP-109-6301	
												STC	Q	STP-109-6301	
B21- MOV067C	MAIN STEAM DRAIN LINE OUTBOARD CONTAINMENT ISOLATION VALVE C	32-05B / K-12	A	ACT	1	1.5	GL	MO	O	C	FAI	RPI	2Y	STP-109-6601	
												LTJ	AppJ	STP-208-3603	
												ETC	Q	STP-109-6301	
												STC	Q	STP-109-6301	
B21- MOV067D	MAIN STEAM DRAIN LINE OUTBOARD CONTAINMENT ISOLATION VALVE D	32-05B / K-17	A	ACT	1	1.5	GL	MO	O	C	FAI	RPI	2Y	STP-109-6601	
												LTJ	AppJ	STP-208-3604	
												ETC	Q	STP-109-6301	
												STC	Q	STP-109-6301	
B21-MOV085	MAIN STEAM ISOLATION VALVE DRAINS ISOLATION VALVE	32-05B / D-10	A	ACT	2	3	GA	MO	O	C	FAI	LT	2Y	STP-208-3606	
												RPI	2Y	STP-109-6601	
												ETC	Q	STP-109-6301	
												STC	Q	STP-109-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 8 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-MOVF086	MAIN STEAM ISOLATION VALVE DRAINS ISOLATION VALVE	32-05B / K-11	A	ACT	2	3	GA	MO	O	C	FAI	LT	2Y	STP-208-3606	
												RPI	2Y	STP-109-6601	
												ETC	Q	STP-109-6301	
												STC	Q	STP-109-6301	
B21- MOVF098A	MAIN STEAM LINE A SHUT-OFF VALVE	03-01C / J-12	A	ACT	2	24	GA	MO	O	C	FAI	LT	2Y	STP-208-3606	
												RPI	2Y	STP-109-6801	
												ETC	Q	STP-109-6801	
												STC	Q	STP-109-6801	
B21- MOVF098B	MAIN STEAM LINE B SHUT-OFF VALVE	03-01C / M-12	A	ACT	2	24	GA	MO	O	C	FAI	LT	2Y	STP-208-3606	
												RPI	2Y	STP-109-6801	
												ETC	Q	STP-109-6801	
												STC	Q	STP-109-6801	
B21- MOVF098C	MAIN STEAM LINE C SHUT-OFF VALVE	03-01C / G-12	A	ACT	2	24	GA	MO	O	C	FAI	LT	2Y	STP-208-3606	
												RPI	2Y	STP-109-6801	
												ETC	Q	STP-109-6801	
												STC	Q	STP-109-6801	
B21- MOVF098D	MAIN STEAM LINE D SHUT-OFF VALVE	03-01C / L-12	A	ACT	2	24	GA	MO	O	C	FAI	LT	2Y	STP-208-3606	
												RPI	2Y	STP-109-6801	
												ETC	Q	STP-109-6801	
												STC	Q	STP-109-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 9 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-RVF041A	MAIN STEAM LINE A PRESSURE RELIEF VALVE	03-01B / F-13	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF041B	MAIN STEAM LINE B AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	03-01B / F-07	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF041C	MAIN STEAM LINE C AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	03-01B / H-14	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF041D	MAIN STEAM LINE D AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	03-01B / H-10	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF041F	MAIN STEAM LINE B AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	03-01B / F-04	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF041G	MAIN STEAM LINE C PRESSURE RELIEF VALVE	03-01B / H-17	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1

Valve Summary Listing - Standard Code ISTC Valves

Page 10 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-RVF041L	MAIN STEAM LINE C PRESSURE RELIEF VALVE	03-01B / H-19	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF047A	MAIN STEAM LINE A AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	03-01B / F-14	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF047B	MAIN STEAM LINE B PRESSURE RELIEF VALVE	03-01B / F-09	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF047C	MAIN STEAM LINE C AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	03-01B / H-18	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF047D	MAIN STEAM LINE D PRESSURE RELIEF VALVE	03-01B / H-08	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF047F	MAIN STEAM LINE B PRESSURE RELIEF VALVE	03-01B / F-03	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF051B	MAIN STEAM LINE B PRESSURE RELIEF VALVE	03-01B / F-06	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1

Valve Summary Listing - Standard Code ISTC Valves

Page 11 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-RVF051C	MAIN STEAM LINE C PRESSURE RELIEF VALVE	03-01B / H-16	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF051D	MAIN STEAM LINE D PRESSURE RELIEF VALVE	03-01B / H-05	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-RVF051G	MAIN STEAM LINE C AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	03-01B / H-20	B/C	ACT	1	8	RV	AO	C	O/C	N/A	RPI RV	2Y 6Y	STP-202-0601 STP-202-0603 STP-000-6606	VRR-RBS- 2017-1
B21-VF010A	REACTOR FEEDWATER INLET HEADER A INBOARD CHECK VALVE	06-01B / J-10	A/C	ACT	1	20	CK	SA	O	O/C	N/A	LTJ CVC CVO	AppJ R R	STP-107-3806 STP-107-3806 STP-000-6501	ROJ-003 ROJ-003
B21-VF010B	REACTOR FEEDWATER INLET HEADER B INBOARD CHECK VALVE	06-01B / N-13	A/C	ACT	1	20	CK	SA	O	O/C	N/A	LTJ CVC CVO	AppJ R R	STP-107-3807 STP-107-3807 STP-000-6501	ROJ-003 ROJ-003
B21-VF024A	MAIN STEAM INBOARD ISOLATION VALVE A AIR OPERATOR ACCUMULATOR INLET CHECK VALVE	03-01A / F-14	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO CVC	CM CM	STP-000-6501 STP-109-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 12 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF024B	MAIN STEAM INBOARD ISOLATION VALVE B AIR OPERATOR ACCUMULATOR INLET CHECK VALVE	03-01A / L-07	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-109-6501	
B21-VF024C	MAIN STEAM INBOARD ISOLATION VALVE C AIR OPERATOR ACCUMULATOR INLET CHECK VALVE	03-01A / L-15	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-109-6501	
B21-VF024D	MAIN STEAM INBOARD ISOLATION VALVE D AIR OPERATOR ACCUMULATOR INLET CHECK VALVE	03-01A / G-07	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-109-6501	
B21-VF029A	MAIN STEAM OUTBOARD ISOLATION VALVE A AIR OPERATOR ACCUMULATOR INLET CHECK VALVE	03-01C / K-17	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-109-6501	
B21-VF029B	MAIN STEAM OUTBOARD ISOLATION VALVE B AIR OPERATOR ACCUMULATOR INLET CHECK VALVE	03-01C / N-17	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-109-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 13 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF029C	MAIN STEAM OUTBOARD ISOLATION VALVE C AIR OPERATOR ACCUMULATOR INLET CHECK VALVE	03-01C / H-17	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-109-6501	
B21-VF029D	MAIN STEAM OUTBOARD ISOLATION VALVE D AIR OPERATOR ACCUMULATOR INLET CHECK VALVE	03-01C / L-17	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-109-6501	
B21-VF036A	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR A AIR INLET CHECK VALVE	03-01B / L-12	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	ROJ-004
												BDO	R	STP-202-6606	
												CVC	R	STP-202-6606	
B21-VF036F	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR F AIR INLET CHECK VALVE	03-01B / K-17	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	ROJ-004
												BDO	R	STP-202-6606	
												CVC	R	STP-202-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 14 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF036G	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR G AIR INLET CHECK VALVE	03-01B / K-19	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	
												BDO	R	STP-202-6606	ROJ-004
												CVC	R	STP-202-6606	ROJ-004
B21-VF036J	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR J AIR INLET CHECK VALVE	03-01B / K-09	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	
												BDO	R	STP-202-6606	ROJ-004
												CVC	R	STP-202-6606	ROJ-004
B21-VF036L	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR L AIR INLET CHECK VALVE	03-01B / K-08	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	
												BDO	R	STP-202-6606	ROJ-004
												CVC	R	STP-202-6606	ROJ-004
B21-VF036M	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR M AIR INLET CHECK VALVE	03-01B / K-02	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	
												BDO	R	STP-202-6606	ROJ-004
												CVC	R	STP-202-6606	ROJ-004

Valve Summary Listing - Standard Code ISTC Valves

Page 15 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF036N	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR N AIR INLET CHECK VALVE	03-01B / K-05	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	
												BDO	R	STP-202-6606	ROJ-004
												CVC	R	STP-202-6606	ROJ-004
B21-VF036P	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR P AIR INLET CHECK VALVE	03-01B / K-16	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	
												BDO	R	STP-202-6606	ROJ-004
												CVC	R	STP-202-6606	ROJ-004
B21-VF036R	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR R AIR INLET CHECK VALVE	03-01B / K-04	A/C	ACT	2	1.5	CK	SA	O/C	C	N/A	LT	2Y	STP-202-6606	
												BDO	R	STP-202-6606	ROJ-004
												CVC	R	STP-202-6606	ROJ-004
B21-VF037A	MAIN STEAM LINE A PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER A VACUUM BREAKER CHECK VALVE	03-01B / E-13	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	

Valve Summary Listing - Standard Code ISTC Valves

Page 16 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF037B	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER B VACUUM BREAKER CHECK VALVE	03-01B / E-07	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037C	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER C VACUUM BREAKER CHECK VALVE	03-01B / F-16	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037D	MAIN STEAM LINE D PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER D VACUUM BREAKER CHECK VALVE	03-01B / G-09	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037E	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER E VACUUM BREAKER CHECK VALVE	03-01B / E-04	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	

Valve Summary Listing - Standard Code ISTC Valves

Page 17 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF037F	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER F VACUUM BREAKER CHECK VALVE	03-01B / F-17	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037G	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER G VACUUM BREAKER CHECK VALVE	03-01B / F-20	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037H	MAIN STEAM LINE A PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER H VACUUM BREAKER CHECK VALVE	03-01B / E-14	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037J	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER J VACUUM BREAKER CHECK VALVE	03-01B / E-09	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	

Valve Summary Listing - Standard Code ISTC Valves

Page 18 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF037K	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER K VACUUM BREAKER CHECK VALVE	03-01B / G-18	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037L	MAIN STEAM LINE D PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER L VACUUM BREAKER CHECK VALVE	03-01B / G-08	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037M	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER M VACUUM BREAKER CHECK VALVE	03-01B / E-03	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037N	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER N VACUUM BREAKER CHECK VALVE	03-01B / E-05	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	

Valve Summary Listing - Standard Code ISTC Valves

Page 19 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF037P	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER P VACUUM BREAKER CHECK VALVE	03-01B / E-17	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037R	MAIN STEAM LINE D PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER R VACUUM BREAKER CHECK VALVE	03-01B / G-02	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF037S	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER S VACUUM BREAKER CHECK VALVE	03-01B / G-21	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF039B	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR B AIR INLET CHECK VALVE	03-01B / K-07	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LT	2Y	STP-202-6606	ROJ-004
												CVC	R	STP-202-6606	
												CVO	R	STP-202-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 20 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF039C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR C AIR INLET CHECK VALVE	03-01B / K-15	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LT	2Y	STP-202-6606	
												CVC	R	STP-202-6606	ROJ-004
												CVO	R	STP-202-6606	ROJ-004
B21-VF039D	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR D AIR INLET CHECK VALVE	03-01B / K-10	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LT	2Y	STP-202-6606	
												CVC	R	STP-202-6606	ROJ-004
												CVO	R	STP-202-6606	ROJ-004
B21-VF039E	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR E AIR INLET CHECK VALVE	03-01B / K-03	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LT	2Y	STP-202-6606	
												CVC	R	STP-202-6606	ROJ-004
												CVO	R	STP-202-6606	ROJ-004
B21-VF039H	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR H AIR INLET CHECK VALVE	03-01B / L-13	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LT	2Y	STP-202-6606	
												CVC	R	STP-202-6606	ROJ-004
												CVO	R	STP-202-6606	ROJ-004

Valve Summary Listing - Standard Code ISTC Valves

Page 21 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF039K	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR K AIR INLET CHECK VALVE	03-01B / K-18	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LT	2Y	STP-202-6606	
												CVC	R	STP-202-6606	ROJ-004
												CVO	R	STP-202-6606	ROJ-004
B21-VF039S	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATORS AIR INLET CHECK VALVE	03-01B / K-20	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LT	2Y	STP-202-6606	
												CVC	R	STP-202-6606	ROJ-004
												CVO	R	STP-202-6606	ROJ-004
B21-VF078A	MAIN STEAM LINE A PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER A VACUUM BREAKER CHECK VALVE	03-01B / E-13	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078B	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER B VACUUM BREAKER CHECK VALVE	03-01B / E-07	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6605	
												CVO	CM	STP-202-6605	

Valve Summary Listing - Standard Code ISTC Valves

Page 22 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF078C	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER C VACUUM BREAKER CHECK VALVE	03-01B / F-16	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078D	MAIN STEAM LINE D PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER D VACUUM BREAKER CHECK VALVE	03-01B / G-09	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078E	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER E VACUUM BREAKER CHECK VALVE	03-01B / E-04	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078F	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER F VACUUM BREAKER CHECK VALVE	03-01B / F-17	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	

Valve Summary Listing - Standard Code ISTC Valves

Page 23 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF078G	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER G VACUUM BREAKER CHECK VALVE	03-01B / F-20	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078H	MAIN STEAM LINE A PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER H VACUUM BREAKER CHECK VALVE	03-01B / E-14	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078J	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER J VACUUM BREAKER CHECK VALVE	03-01B / E-09	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6605	
												CVO	CM	STP-202-6605	
B21-VF078K	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER K VACUUM BREAKER CHECK VALVE	03-01B / F-18	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	

Valve Summary Listing - Standard Code ISTC Valves

Page 24 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF078L	MAIN STEAM LINE D PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER L VACUUM BREAKER CHECK VALVE	03-01B / G-08	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078M	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER M VACUUM BREAKER CHECK VALVE	03-01B / E-03	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078N	MAIN STEAM LINE B PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER N VACUUM BREAKER CHECK VALVE	03-01B / E-05	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078P	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER P VACUUM BREAKER CHECK VALVE	03-01B / E-17	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	

Valve Summary Listing - Standard Code ISTC Valves

Page 25 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B21-VF078R	MAIN STEAM LINE D PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER R VACUUM BREAKER CHECK VALVE	03-01B / G-02	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B21-VF078S	MAIN STEAM LINE C PRESSURE RELIEF VALVE DISCH LINE TO DIFFUSER S VACUUM BREAKER CHECK VALVE	03-01B / F-21	C	ACT	3	10	CK	SA	C	O/C	N/A	CVC	CM	STP-202-6805	
												CVO	CM	STP-202-6805	
B33-AOV019	REACTOR COOLANT SYSTEM RECIRC SAMPLE LINE DRYWELL ISOLATION VALVE	25-01C / L-09	B	ACT	2	0.75	GL	AO	O	C	C	RPI	2Y	STP-610-6602	
												ETC	Q	STP-610-6301	
												FSC	Q	STP-610-6301	
												STC	Q	STP-610-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 26 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B33-AOVF020	REACTOR COOLANT SYSTEM RECIRC SAMPLE LINE DRYWELL ISOLATION VALVE	25-01C / L-08	B	ACT	2	0.75	GL	AO	O	C	C	RPI	2Y	STP-610-6602	
												ETC	Q	STP-610-6301	
												FSC	Q	STP-610-6301	
												STC	Q	STP-610-6301	
B33-VF013A	REACTOR RECIRCULATION PUMP A SEAL CAVITY PURGE SUPPLY LINE CHECK VALVE	25-01C / F-05	C	ACT	2	0.75	CK	SA	O	O/C	N/A	CVC	CM	STP-053-6801	
												CVO	CM	STP-000-6501	
B33-VF013B	REACTOR RECIRCULATION PUMP B SEAL CAVITY PURGE SUPPLY LINE CHECK VALVE	25-01C / F-17	C	ACT	2	0.75	CK	SA	O	O/C	N/A	CVC	CM	STP-053-6801	
												CVO	CM	STP-000-6501	
B33-VF017A	REACTOR RECIRCULATION PUMP A SEAL CAVITY PURGE SUPPLY LINE CHECK VALVE	25-01C / E-07	C	ACT	2	0.75	CK	SA	O	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-053-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 27 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
B33-VF017B	REACTOR RECIRCULATION PUMP B SEAL CAVITY PURGE SUPPLY LINE CHECK VALVE	25-01C / E-16	C	ACT	2	0.75	CK	SA	O	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-053-6801	
C11-AOVF010	CONTROL ROD DRIVE HYDRAULIC UNIT SCRAM DISCHARGE VOLUME VENT AND DRAIN VALVE	36-01C / H-16	B	ACT	2	1	GL	AO	O	C	C	ETC	Q	STP-052-6301	
												FSC	Q	STP-052-6301	
												STC	Q	STP-052-6301	
C11-AOVF011	CONTROL ROD DRIVE HYDRAULIC UNIT SCRAM DISCHARGE VOLUME VENT AND DRAIN VALVE	36-01C / A-17	B	ACT	2	2	GL	AO	O	C	C	ETC	Q	STP-052-6301	
												FSC	Q	STP-052-6301	
												STC	Q	STP-052-6301	
C11-AOVF180	CONTROL ROD DRIVE HYDRAULIC UNIT SCRAM DISCHARGE VOLUME VENT AND DRAIN VALVE	36-01C / H-17	B	ACT	2	1	GL	AO	O	C	C	ETC	Q	STP-052-6301	
												FSC	Q	STP-052-6301	
												STC	Q	STP-052-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 28 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
C11-AOVF181	CONTROL ROD DRIVE HYDRAULIC UNIT SCRAM DISCHARGE VOLUME VENT AND DRAIN VALVE	36-01C / A-18	B	ACT	2	2	GL	AO	O	C	C	ETC	Q	STP-052-6301	
												FSC	Q	STP-052-6301	
												STC	Q	STP-052-6301	
C11-MOVF083	CONTROL ROD DRIVE PUMP DISCHARGE HEADER CONTAINMENT ISOLATION VALVE	36-01A / L-02	A	ACT	2	2	GL	MO	O	C	FAI	RPI	2Y	STP-052-6602	ROJ-001
												LTJ	AppJ	STP-052-3804	
												ETC	R	STP-052-6602	
												STC	R	STP-052-6602	
C11-VF122	CONTROL ROD DRIVE PUMP DISCHARGE HEADER IN CONTAINMENT CHECK VALVE	36-01A / F-16	A/C	ACT	2	2	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-052-3804	
												CVC	CM	STP-052-3804	
												CVO	CM	STP-000-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 29 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
C41- MOV001A	STANDBY LIQUID CONTROL STORAGE TANK A1 OUTLET VALVE A TO STANDBY LIQUID CONTROL PUMP A	27-16A / H-15	B	ACT	2	3	GL	MO	C	O	FAI	RPI	2Y	STP-000-6800	
												ETO	CS	STP-000-6800	CSJ-012
												STO	CS	STP-000-6800	CSJ-012
C41- MOV001B	STANDBY LIQUID CONTROL STORAGE TANK A1 OUTLET VALVE B TO STANDBY LIQUID CONTROL PUMP B	27-16A / D-15	B	ACT	2	3	GL	MO	C	O	FAI	RPI	2Y	STP-000-6800	
												ETO	CS	STP-000-6800	CSJ-012
												STO	CS	STP-000-6800	CSJ-012
C41-RVF029A	STANDBY LIQUID CONTROL PUMP 1A DISCHARGE HEADER PRESSURE RELIEF VALVE	27-16A / J-11	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
C41-RVF029B	STANDBY LIQUID CONTROL PUMP 1B DISCHARGE HEADER PRESSURE RELIEF VALVE	27-16A / E-11	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
C41-VEXF004A	STANDBY LIQUID CONTROL PUMP 1A DISCHARGE HEADER EXPLOSIVE VALVE	27-16A / J-07	D	ACT	1	1.5	XA	EXP	C	O/C	N/A	EXP	5Y	STP-201-6601	

Valve Summary Listing - Standard Code ISTC Valves

Page 30 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
C41-VEXF004B	STANDBY LIQUID CONTROL PUMP 1B DISCHARGE HEADER EXPLOSIVE VALVE	27-16A / E-07	D	ACT	1	1.5	XA	EXP	C	O/C	N/A	EXP	5Y	STP-201-6601	
C41-VF006	STANDBY LIQUID CONTROL PUMPS INJECTION LINE CHECK VALVE	27-16A / F-05	C	ACT	1	1.5	CK	SA	C	O/C	N/A	CVC	CM	STP-201-6602	
												CVO	CM	STP-201-6601	
C41-VF007	STANDBY LIQUID CONTROL PUMPS INJECTION LINE CHECK VALVE	27-16A / F-03	C	ACT	1	1.5	CK	SA	C	O/C	N/A	CVC	CM	STP-201-6602	
												CVO	CM	STP-201-6601	
C41-VF008	STANDBY LIQUID CONTROL PUMPS INJECTION LINE MANUAL ISOLATION VALVE	27-16A / G-03	B	PASS	1	1.5	GL	H	LO	O	N/A	RPI	2Y	STP-201-6602	
C41-VF031	STANDBY LIQUID CONTROL TEST TANK A2 OUTLET ISOLATION VALVE	27-16A / M-13	B	PASS	2	3	GA	H	LC	C	N/A	RPI	2Y	STP-201-6603	
C41-VF033A	STANDBY LIQUID CONTROL PUMP 1A DISCHARGE HEADER CHECK VALVE	27-16A / J-10	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CVC	CM	STP-000-6601	
												CVO	CM	STP-201-6310	
C41-VF033B	STANDBY LIQUID CONTROL PUMP 1B DISCHARGE HEADER CHECK VALVE	27-16A / E-10	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CVC	CM	STP-000-6602	
												CVO	CM	STP-201-6310	
CCP-MOV129	CCP LOOP B OUTLET ISOLATION VALVE	09-01B / N-16	B	ACT	3	12	BF	MO	O	C	FAI	RPI	2Y	STP-115-6602	
												ETC	Q	STP-115-6302	
												STC	Q	STP-115-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 31 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CCP-MOV130	CCP LOOP A OUTLET ISOLATION VALVE	09-01B / J-16	B	ACT	3	12	BF	MO	O	C	FAI	RPI ETC STC	2Y Q Q	STP-115-6601 STP-115-6301 STP-115-6301	
CCP-MOV138	CCP CONTAINMENT SUPPLY HEADER OUTBOARD ISOLATION VALVE	09-01A / B-19	A	ACT	2	10	GA	MO	O	C	FAI	RPI LTJ ETC STC	2Y AppJ CS CS	STP-115-6801 STP-115-3808 STP-115-6801 STP-115-6801	 CSJ-004 CSJ-004
CCP-MOV142	CCP DRYWELL SUPPLY HEADER OUTBOARD ISOLATION VALVE	09-01A / B-16	B	ACT	2	6	BF	MO	O	C	FAI	RPI ETC STC	2Y CS CS	STP-115-6801 STP-115-6801 STP-115-6801	 CSJ-004 CSJ-004
CCP-MOV143	CCP DRYWELL RETURN HEADER OUTBOARD MOTOR OPERATED ISOLATION VALVE	09-01A / J-09	B	ACT	2	6	BF	MO	O	C	FAI	RPI ETC STC	2Y CS CS	STP-115-6801 STP-115-6801 STP-115-6801	 CSJ-004 CSJ-004

Valve Summary Listing - Standard Code ISTC Valves

Page 32 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CCP-MOV144	CCP DRYWELL RETURN HEADER INBOARD MOTOR OPERATED ISOLATION VALVE	09-01A / H-09	B	ACT	2	6	BF	MO	O	C	FAI	RPI	2Y	STP-115-6801	
												ETC	CS	STP-115-6801	CSJ-004
												STC	CS	STP-115-6801	CSJ-004
CCP-MOV158	CCP CONTAINMENT RETURN HEADER INBOARD ISOLATION VALVE	09-01A / J-17	A	ACT	2	10	GA	MO	O	C	FAI	RPI	2Y	STP-115-6801	
												LTJ	AppJ	STP-115-3809	
												ETC	CS	STP-115-6801	CSJ-004
												STC	CS	STP-115-6801	CSJ-004
CCP-MOV159	CCP CONTAINMENT RETURN HEADER OUTBOARD ISOLATION VALVE	09-01A / J-19	A	ACT	2	10	GA	MO	O	C	FAI	RPI	2Y	STP-115-6801	
												LTJ	AppJ	STP-115-3809	
												ETC	CS	STP-115-6801	CSJ-004
												STC	CS	STP-115-6801	CSJ-004
CCP-MOV163	CCP SUPPLY HEADER FOR C11-PC001A & B DOWNSTREAM INLET MTR OPERATED ISOLATION VALVE	09-01B / M-07	B	ACT	3	2	GL	MO	O	C	FAI	RPI	2Y	STP-115-6602	
												ETC	Q	STP-115-6302	
												STC	Q	STP-115-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 33 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CCP-MOV169	CCP SUPPLY HEADER FOR C11-PC001A & B UPSTREAM INLET ISOLATION VALVE	09-01B / M-07	B	ACT	3	2	GL	MO	O	C	FAI	RPI	2Y	STP-115-6602	
												ETC	Q	STP-115-6302	
												STC	Q	STP-115-6302	
CCP-MOV16A	CCP LOOP A INLET HEADER ISOLATION VALVE	09-01B / J-02	B	ACT	3	12	BF	MO	O	C	FAI	RPI	2Y	STP-115-6601	
												ETC	Q	STP-115-6301	
												STC	Q	STP-115-6301	
CCP-MOV16B	CCP LOOP B INLET MOTOR OPERATED ISOLATION VALVE	09-01B / L-08	B	ACT	3	12	BF	MO	O	C	FAI	RPI	2Y	STP-115-6602	
												ETC	Q	STP-115-6302	
												STC	Q	STP-115-6302	
CCP-MOV335	CCP LOOP A OUTLET MOTOR OPERATED ISOLATION VALVE	09-01B / J-16	B	ACT	3	12	BF	MO	O	C	FAI	RPI	2Y	STP-115-6601	
												ETC	Q	STP-115-6301	
												STC	Q	STP-115-6301	
CCP-MOV336	CCP LOOP B OUTLET MOTOR OPERATED ISOLATION VALVE	09-01B / N-16	B	ACT	3	12	BF	MO	O	C	FAI	RPI	2Y	STP-115-6602	
												ETC	Q	STP-115-6302	
												STC	Q	STP-115-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 34 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CCP-RV151	CCP DRYWELL RETURN HEADER INBOARD PRESSURE RELIEF VALVE	09-01A / H-08	C	ACT	2	0.75	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
CCP-RV155	CCP CONTAINMENT RETURN HEADER INBOARD PRESSURE RELIEF VALVE	09-01A / J-16	C	ACT	2	0.75	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
CCP-RV57A	CCP RETURN FOR SPENT FUEL POOL SFC- E1A OUTLET PRESSURE RELIEF VALVE	09-01B / K-13	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
CCP-RV57B	CCP RETURN FOR SPENT FUEL POOL SFC- E1B OUTLET PRESSURE RELIEF VALVE	09-01B / P-13	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
CCP-RV60A	CCP SUPPLY FOR RHR E12-PC002A BEARING COOLER OUTLET PRESSURE RELIEF VALVE	09-01B / H-12	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
CCP-RV60B	CCP SUPPLY FOR RHR E12-PC002B BEARING COOLER OUTLET PRESSURE RELIEF VALVE	09-01B / K-15	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
CCP-V118	CCP CONTAINMENT SUPPLY HEADER INBOARD CHECK VALVE	09-01A / B-17	A/C	ACT	2	10	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-115-3808	
												CVC	CM	STP-115-3808	
												CVO	CM	STP-000-6501	
CCP-V119	CCP DRYWELL SUPPLY HEADER INBOARD CHECK VALVE	09-01A / B-15	C	ACT	2	6	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6617	
												CVO	CM	STP-000-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 35 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CCP-V133	CCP DRYWELL RETURN HEADER CCP-MOV144 BYPASS CHECK VALVE	09-01A / H-09	C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6617	
												CVO	CM	STP-115-6501	
CCP-V160	CCP CONTAINMENT RETURN HEADER CCP- MOV158 BYPASS CHECK VALVE	09-01A / K-17	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-115-3809	
												CVC	CM	STP-115-3809	
												CVO	CM	STP-115-6501	
CCP-V204	CCP RETURN FOR SPENT FUEL POOL SFC- E1B OUTLET CHECK VALVE	09-01B / N-13	C	ACT	3	10	CK	SA	O/C	O	N/A	BDC	CM	STP-115-6502	
												CVO	CM	STP-000-6501	
CCP-V206	CCP SUPPLY FOR SPENT FUEL POOL SFC-E1B INLET ISOLATION VALVE	09-01B / P-08	B	ACT	3	2	GL	H	C	O/C	N/A	MS	2Y	STP-115-6801	
CCP-V208	CCP SUPPLY FOR SPENT FUEL POOL SFC-E1A INLET ISOLATION VALVE	09-01B / K-08	B	ACT	3	2	GL	H	C	O/C	N/A	MS	2Y	STP-115-6801	
CCP-V209	CCP RETURN FOR SPENT FUEL POOL SFC- E1A OUTLET CHECK VALVE	09-01B / J-13	C	ACT	3	10	CK	SA	O/C	O	N/A	BDC	CM	STP-115-6503	
												CVO	CM	STP-000-6501	
CCP-V300	CCP SUPPLY FOR RHR E12-PC002A BEARING COOLER INLET CHECK VALVE	09-01B / J-08	C	ACT	3	1.5	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-115-6503	
CCP-V337	CCP RETURN HEADER FOR C11-PC001A & B OUTLET CHECK VALVE	09-01B / M-13	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-115-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 36 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CCP-V338	CCP RETURN HEADER FOR C11-PC001A & B OUTLET CHECK VALVE	09-01B / M-13	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-115-6501	
CCP-V72	CCP LOOP B INLET CHECK VALVE	09-01B / L-08	C	ACT	3	12	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-115-6501	
CCP-V73	CCP LOOP A INLET CHECK VALVE	09-01B / J-03	C	ACT	3	12	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-115-6501	
CCP-V83	CCP SUPPLY FOR RHR E12-PC002B BEARING COOLER OUTLET CHECK VALVE	09-01B / L-15	C	ACT	3	1.5	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-115-6502	
CCP-V92	CCP SUPPLY FOR RHR E12-PC002A BEARING COOLER OUTLET CHECK VALVE	09-01B / H-13	C	ACT	3	1.5	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-115-6503	

Valve Summary Listing - Standard Code ISTC Valves

Page 37 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV31A	CNTMNT MONIT SYS H2 ANALYZER TRANSMITTER A INLET LINE OUTBOARD CONTAINMENT ISOLATION VALVE	33-02B / G-19	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV31B	CNTMNT MONIT SYS H2 ANALYZER TRANSMITTER B INLET OUTBOARD CONTAINMENT ISOLATION VALVE	33-02A / G-05	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 38 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV31C	CNTMNT MONIT SYS H2 ANALYZER TRANSMITTER A OUTLET LINE OUTBOARD CONTAINMENT ISOLATION VALVE	33-02B / G-19	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV31D	CNTMNTMONIT SYS H2 ANALYZER TRANSMITTER B OUTLET OUTBOARD ISOLATION VALVE	33-02A / F-05	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 39 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV32A	CNTMNT DRYWELL ATMOSPHERE RAD SMPL SUPPLY LINE ISOLATION VALVE	33-02B / H-07	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6603	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV32G	CNTMNT DRYWELL ATMOSPHERE RAD SMPL RETURN LINE ISOLATION VALVE	33-02B / F-07	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6603	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 40 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33A	CONTAINMENT MONIT SYS H2 SAMPLE LINE FROM HVR-FN1A ISOLATION VALVE	33-02B / K-15	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33AA	CNTMNT MONIT SYS H2 SMPL LINE FROM BELOW MAIN STEAM TNL ISOLATION VALVE	33-02B / K-07	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 41 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33B	CONTAINMENT MONIT SYS H2 SAMPLE LINE FROM HVR-FN1D ISOLATION VALVE	33-02A / J-13	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	
CMS-SOV33BB	CNTMNT MONIT SYS H2 SMPL LINE FROM BELOW MAIN STEAM TNL ISOLATION VALVE	33-02A / K-06	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 42 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33C	CONTAINMENT MONIT SYS H2 SAMPLE LINE FROM HVR-FN1B ISOLATION VALVE	33-02B / K-16	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33D	CONTAINMENT MONIT SYS H2 SAMPLE LINE FROM HVR-FN1C ISOLATION VALVE	33-02A / K-13	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 43 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33E	CNTMNT MONIT H2 SAMPLE LINE FROM TOP OF CNTMNT DOME ISOLATION VALVE	33-02B / K-17	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33F	CNTMNT MONIT SYS H2 SAMPLE LINE FROM TOP OF CNTMNT DOME ISOLATION VALVE	33-02A / J-14	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 44 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33G	CNTMNT MONIT SYS H2 SAMPLE LINE FROM RWCU VLV NEST ISOLATION VALVE	33-02B / K-14	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33H	CNTMNT MONIT SYS H2 SAMPLE LINE FROM RWCU VALVE NEST ISOLATION VALVE	33-02A / K-12	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 45 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33J	CNTMNT MONIT SYS H2 SMPL LINE FROM FUEL POOL COOLING ISOLATION VALVE	33-02B / K-13	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33K	CNTMNT MONIT SYS H2 SMPL LINE FROM FUEL POOL COOLING RM ISOLATION VALVE	33-02A / J-11	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 46 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33S	CMS H2 SAMPLE LINE FROM RWCU BACKWASH TANK CUBICLE ISOLATION VALVE	33-02B / K-12	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33T	CMS H2 SAMPLE LINE FROM RWCU BACKWASH TANK CUBICLE ISOLATION VALVE	33-02A / K-10	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 47 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33U	CNTMNT MONIT SYS H2 SAMPLE LINE FROM RWCU HTEXCHGR RM ISOLATION VALVE	33-02B / K-11	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33V	CNTMNT MONIT SYS H2 SAMPLE LINE FROM RWCU HTEXCHGR RM ISOLATION VALVE	33-02A / J-09	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 48 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33W	CNTMNT MONIT SYS H2 SMPL LINE FROM ABOVE MAIN STEAM TNL ISOLATION VALVE	33-02B / K-10	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33X	CNTMNT MONIT SYS H2 SMPL LINE FROM ABOVE MAIN STEAM TNL ISOLATION VALVE	33-02A / K-08	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 49 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV33Y	CMS H2 SAMPLE LINE FROM OUTSIDE DW PERSONNEL HATCH ISOLATION VALVE	33-02B / K-09	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV33Z	CMS H2 SAMPLE LINE FROM OUTSIDE DW PERSONNEL HATCH ISOLATION VALVE	33-02A / J-07	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 50 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV34A	CNTMNT MONIT SYS H2 SMPL LINE ABOVE REFUEL SEAL SUPPORT ISOLATION VALVE	33-02B / G-07	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV34B	CNTMNT MONIT SYS H2 SMPL LINE ABOVE REFUEL SEAL SUPPORT ISOLATION VALVE	33-02A / G-15	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 51 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV34C	CNTMNT MONIT SYS H2 SMPL LINE BELOW REFUEL SEAL SUPPORT ISOLATION VALVE	33-02B / G-07	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												FSC	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV34D	CNTMNT MONIT SYS H2 SMPL LINE BELOW REFUEL SEAL SUPPORT ISOLATION VALVE	33-02A / H-15	B	ACT	2	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												FSC	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 52 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV35A	CNTMNT MONIT SYS H2 ANALYZER TRANSMITTER A OUTLET LINE INBOARD CONTAINMENT ISOLATION VALVE	33-02B / G-16	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV35B	CNTMNT MONIT SYS H2 ANALYZER TRANSMITTER B OUTLET INBOARD ISOLATION VALVE	33-02A / F-06	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 53 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CMS-SOV35C	CNTMNT MONIT SYS H2 ANALYZER TRANSMITTER A INLET LINE INBOARD CONTAINMENT ISOLATION VALVE	33-02B / G-16	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6601	
												ETC	Q	STP-552-6301	
												ETO	Q	STP-552-6301	
												STC	Q	STP-552-6301	
												STO	Q	STP-552-6301	
CMS-SOV35D	CNTMNT MONIT SYS H2 ANALYZER TRANSMITTER B INLET INBOARD CONTAINMENT ISOLATION VALVE	33-02A / G-06	B	ACT	2	0.75	GL	SO	O	O/C	FAI	RPI	2Y	STP-552-6602	
												ETC	Q	STP-552-6302	
												ETO	Q	STP-552-6302	
												STC	Q	STP-552-6302	
												STO	Q	STP-552-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 54 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CNS-MOV125	REACTOR CONTAINMENT BUILDING CONDENSATE SUPPLY LINE OUTBOARD CNTMNT ISOL VLV	04-03C / G-15	A	ACT	2	4	GA	MO	O	C	FAI	RPI	2Y	STP-000-6600	
												LTJ	AppJ	STP-106-3805	
												ETC	Q	STP-000-6303	
												STC	Q	STP-000-6303	
CNS-RV140	CONDENSATE SUPPLY LINE (TO RHS SYSTEM) PRESSURE RELIEF VALVE	04-03C / J-21	C	ACT	2	0.75	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
CNS-V86	REACTOR CONTAINMENT BUILDING CNDS SUPPLY HEADER CNTMNT INBOARD CHECK VLV	04-03C / G-18	A/C	ACT	2	4	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-106-3805	
												CVC	CM	STP-106-3805	
												CVO	CM	STP-000-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 55 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CPM-MOV1A	DRYWELL HYDROGEN MIXING TRAIN A OUTLET LINE DRYWELL OUTBOARD ISOLATION VALVE	27-21A / J-18	B	ACT	2	6	BF	MO	C	O/C	FAI	RPI	2Y	STP-254-6801	
												ETC	CS	STP-254-6801	CSJ-010
												ETO	CS	STP-254-6801	CSJ-010
												STC	CS	STP-254-6801	CSJ-010
												STO	CS	STP-254-6801	CSJ-010
CPM-MOV1B	DRYWELL HYDROGEN MIXING TRAIN B OUTLET LINE DRYWELL OUTBOARD ISOLATION VALVE	27-21A / J-14	B	ACT	2	6	BF	MO	C	O/C	FAI	RPI	2Y	STP-254-6801	
												ETC	CS	STP-254-6801	CSJ-010
												ETO	CS	STP-254-6801	CSJ-010
												STC	CS	STP-254-6801	CSJ-010
												STO	CS	STP-254-6801	CSJ-010

Valve Summary Listing - Standard Code ISTC Valves

Page 56 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CPM-MOV2A	DRYWELL HYDROGEN MIXING TRAIN A INLET LINE DRYWELL OUTBOARD ISOLATION VALVE	27-21A / G-14	B	ACT	2	6	BF	MO	C	O/C	FAI	RPI	2Y	STP-254-6801	
												ETC	CS	STP-254-6801	CSJ-010
												ETO	CS	STP-254-6801	CSJ-010
												STC	CS	STP-254-6801	CSJ-010
												STO	CS	STP-254-6801	CSJ-010
CPM-MOV2B	DRYWELL HYDROGEN MIXING TRAIN B INLET LINE DRYWELL OUTBOARD ISOLATION VALVE	27-21A / G-18	B	ACT	2	6	BF	MO	C	O/C	FAI	RPI	2Y	STP-254-6801	
												ETC	CS	STP-254-6801	CSJ-010
												ETO	CS	STP-254-6801	CSJ-010
												STC	CS	STP-254-6801	CSJ-010
												STO	CS	STP-254-6801	CSJ-010

Valve Summary Listing - Standard Code ISTC Valves

Page 57 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CPM-MOV3A	DRYWELL HYDROGEN MIXING TRAIN A OUTLET LINE DRYWELL INBOARD ISOLATION VALVE	27-21A / J-17	B	ACT	2	6	BF	MO	C	O/C	FAI	RPI	2Y	STP-254-6801	
												ETC	CS	STP-254-6801	CSJ-010
												ETO	CS	STP-254-6801	CSJ-010
												STC	CS	STP-254-6801	CSJ-010
												STO	CS	STP-254-6801	CSJ-010
CPM-MOV3B	DRYWELL HYDROGEN MIXING TRAIN B OUTLET LINE DRYWELL INBOARD ISOLATION VALVE	27-21A / J-15	B	ACT	2	6	BF	MO	C	O/C	FAI	RPI	2Y	STP-254-6801	
												ETC	CS	STP-254-6801	CSJ-010
												ETO	CS	STP-254-6801	CSJ-010
												STC	CS	STP-254-6801	CSJ-010
												STO	CS	STP-254-6801	CSJ-010

Valve Summary Listing - Standard Code ISTC Valves

Page 58 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CPM-MOV4A	DRYWELL HYDROGEN MIXING TRAIN A INLET LINE DRYWELL INBOARD ISOLATION VALVE	27-21A / G-14	B	ACT	2	6	BF	MO	C	O/C	FAI	RPI	2Y	STP-254-6801	
												ETC	CS	STP-254-6801	CSJ-010
												ETO	CS	STP-254-6801	CSJ-010
												STC	CS	STP-254-6801	CSJ-010
												STO	CS	STP-254-6801	CSJ-010
CPM-MOV4B	DRYWELL HYDROGEN MIXING TRAIN B INLET LINE DRYWELL INBOARD ISOLATION VALVE	27-21A / G-17	B	ACT	2	6	BF	MO	C	O/C	FAI	RPI	2Y	STP-254-6801	
												ETC	CS	STP-254-6801	CSJ-010
												ETO	CS	STP-254-6801	CSJ-010
												STC	CS	STP-254-6801	CSJ-010
												STO	CS	STP-254-6801	CSJ-010

Valve Summary Listing - Standard Code ISTC Valves

Page 59 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CPP-MOV104	HYDROGEN PURGE FAN EXHAUST LINE ISOLATION VALVE	27-21A / F-03	A	ACT	2	3	GA	MO	C	C	FAI	RPI	2Y	STP-000-6600	
												LTJ	AppJ	STP-403-7301	
												ETC	Q	STP-000-6303	
												STC	Q	STP-000-6303	
CPP-MOV105	HYDROGEN PURGE HEADER EXHAUST LINE TO ANNULUS ISOLATION VALVE	27-21A / H-02	A	ACT	2	3	GA	MO	C	C	FAI	RPI	2Y	STP-254-6600	
												LTJ	AppJ	STP-403-7301	
												ETC	Q	STP-000-6303	
												STC	Q	STP-000-6303	
CPP-SOV140	SERVICE AIR SUPPLY LINE (TO HYDROGEN PURGE LINE) SOLENOID ISOLATION VALVE	27-21A / H-10	A	ACT	2	1	GL	SO	C	C	C	RPI	2Y	STP-000-6600	
												LTJ	AppJ	STP-403-7301	
												ETC	Q	STP-000-6303	
												FSC	Q	STP-000-6303	
												STC	Q	STP-000-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 60 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CSH-V12	HPCS PUMP DISCHARGE LINE FILL PUMP DISCHARGE HEADER CHECK VALVE	27-04A / D-15	C	ACT	2	1.5	CK	SA	O/C	O	N/A	CVC	Q	STP-203-6305	
												CVO	Q	STP-203-6305	
CSL-V10	LOW PRESSURE CORE SPRAY PUMP MINIMUM FLOW TO SUPPRESSION POOL CHECK VALVE	27-05A / H-16	C	ACT	2	4	CK	SA	C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-205-6301	
DER-AOV126	REACTOR BUILDING EQUIPMENT DRAIN INBOARD CONTAINMENT ISOLATION VALVE	32-09B / B-09	A	ACT	2	4	GL	AO	O	C	C	RPI	2Y	STP-609-6601	
												LTJ	AppJ	STP-609-3827	
												ETC	Q	STP-609-6301	
												FSC	Q	STP-609-6301	
												STC	Q	STP-609-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 61 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DER-AOV127	REACTOR BUILDING EQUIPMENT DRAIN OUTBOARD CONTAINMENT ISOLATION VALVE	32-09B / B-08	A	ACT	2	4	GL	AO	O	C	C	RPI	2Y	STP-609-6601	
												LTJ		STP-609-3827	
												ETC		STP-609-6301	
												FSC		STP-609-6301	
												STC		STP-609-6301	
DER-RV180	CONTAINMENT EQUIPMENT DRAIN SUMP PUMP DISCHARGE HEADER PRESSURE RELIEF VALVE	32-09B / C-14	C	ACT	2	1	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
DER-V14	CONTROL ROD DRIVE SYSTEM DRAIN HEADER OUTBOARD DRYWELL CHECK VALVE	32-09G / F-19	C	ACT	2	8	CK	SA	O	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DER-V15	CONTROL ROD DRIVE SYSTEM DRAIN HEADER INBOARD DRYWELL CHECK VALVE	32-09G / F-18	C	ACT	2	8	CK	SA	O	O/C	N/A	CVC	CM	STP-000-6617	
												CVO	CM	STP-000-6617	

Valve Summary Listing - Standard Code ISTC Valves

Page 62 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DER-V16	CRDM SCRAM DISCHARGE VOLUME DRAIN HEADER INBOARD DRYWELL CHECK VALVE	32-09B / H-02	C	ACT	2	8	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6617	
												CVO	CM	STP-000-6617	
DER-V17	CRDM SCRAM DISCHARGE VOLUME DRAIN HEADER OUTBOARD DRYWELL CHECK VALVE	32-09B / H-03	C	ACT	2	8	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DER-V4	CONTAINMENT ISOLATION VLV DER-AOV 126 BYPASS CHECK VALVE	32-09B / B-09	A/C	ACT	2	0.75	CK	SA	C	O/C	N/A	LTJ	AppJ	STP-609-3827	
												CVC	CM	STP-602-3827	
												CVO	CM	STP-609-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 63 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DFR-AOV101	CONTAINMENT AND DRYWELL FLOOR DRAIN SUMP PUMP DISCHARGE HEADER INBOARD CONTAINMENT ISOL VALVE	32-09F / C-08	A	ACT	2	4	GL	AO	O	C	C	RPI	2Y	STP-609-6601	
												LTJ	AppJ	STP-609-3826	
												ETC	Q	STP-609-6301	
												FSC	Q	STP-609-6301	
												STC	Q	STP-609-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 64 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DFR-AOV102	CONTAINMENT AND DRYWELL FLOOR DRAIN SUMP PUMP DISCHARGE HEADER OUTBOARD CONTAINMENT ISOL VALVE	32-09K / F-08	A	ACT	2	4	GL	AO	O	C	C	RPI	2Y	STP-609-6601	
												LTJ	AppJ	STP-609-3826	
												ETC	Q	STP-609-6301	
												FSC	Q	STP-609-6301	
												STC	Q	STP-609-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 65 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DFR-MOV146	AUX BLDG FLOOR DRAIN SUMP PUMPS 5A / 5D & 5B / 5E DISCHARGE HDR TO SUPPRESSION POOL ISOL VALVE	32-09P / D-11	B	ACT	2	4	GA	MO	C	O/C	FAI	RPI	2Y	STP-609-6601	
												ETC	Q	STP-609-6301	
												ETO	Q	STP-609-6301	
												STC	Q	STP-609-6301	
												STO	Q	STP-609-6301	
DFR-RV21	DRYWELL FLOOR DRAIN SUMP PUMPS 1A & B DISCHARGE HEADER PRESSURE RELIEF VALVE	32-09F / D-10	C	ACT	2	0.75	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
DFR-V1	CONTAINMENT FLOOR DRAIN SUMP INLET HEADER OUTBOARD DRYWELL CHECK VALVE	32-09A / C-20	C	ACT	2	8	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V107	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3D & 3K DISCHARGE HEADER UPSTREAM CHECK VALVE	32-09J / L-13	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	

Valve Summary Listing - Standard Code ISTC Valves

Page 66 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DFR-V108	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3D & 3K DISCHARGE HEADER DOWNSTREAM CHECK VALVE	32-09J / L-12	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V117	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3E & 3L DISCHARGE HEADER UPSTREAM CHECK VALVE	32-09K / K-02	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V118	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3E & 3L DISCHARGE HEADER DOWNSTREAM CHECK VALVE	32-09K / K-01	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V127	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3F & 3M DISCHARGE HEADER UPSTREAM CHECK VALVE	32-09K / G-13	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	

Valve Summary Listing - Standard Code ISTC Valves

Page 67 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DFR-V128	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3F & 3M DISCHARGE HEADER DOWNSTREAM CHECK VALVE	32-09K / G-12	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V180	INBOARD CONTAINMENT ISOLATION VLV DFR- AOV101 BYPASS CHECK VALVE	32-09F / B-08	A/C	ACT	2	4	CK	SA	C	O/C	N/A	LTJ	AppJ	STP-609-3826	
												CVC	CM	STP-609-3826	
												CVO	CM	STP-609-6801	
DFR-V181	AUX BLDG FLOOR DRAIN SUMP PUMPS 5B / 5E DISCHARGE HDR TO SUPPRESSION POOL CHECK VALVE	32-09P / C-10	C	ACT	2	4	CK	SA	C	O/C	N/A	CVC	R	STP-609-6301	ROJ-005
												CVO	R	STP-609-6603	ROJ-005
DFR-V182	AUX BLDG FLOOR DRAIN SUMP PUMPS 5A / 5D DISCHARGE HDR TO SUPPRESSION POOL CHECK VALVE	32-09P / C-12	C	ACT	2	4	CK	SA	C	O/C	N/A	CVC	R	STP-609-6301	ROJ-005
												CVO	R	STP-609-6603	ROJ-005

Valve Summary Listing - Standard Code ISTC Valves

Page 68 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DFR-V2	CONTAINMENT FLOOR DRAIN SUMP INLET HEADER INBOARD DRYWELL CHECK VALVE	32-09A / C-20	C	ACT	2	8	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6617	
												CVO	CM	STP-000-6617	
DFR-V3	CONTAINMENT FLOOR DRAIN SUMP INLET HEADER INBOARD DRYWELL CHECK VALVE	32-09A / C-13	C	ACT	2	8	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6617	
												CVO	CM	STP-000-6617	
DFR-V4	CONTAINMENT FLOOR DRAIN SUMP INLET HEADER OUTBOARD DRYWELL CHECK VALVE	32-09A / C-12	C	ACT	2	8	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V78	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3A & 3G DISCHARGE HEADER UPSTREAM CHECK VALVE	32-09K / C-06	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V79	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3A & 3G DISCHARGE HEADER DOWNSTREAM CHECK VALVE	32-09K / C-06	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	

Valve Summary Listing - Standard Code ISTC Valves

Page 69 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DFR-V87	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3B & 3H DISCHARGE HEADER UPSTREAM CHECK VALVE	32-09J / D-07	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V88	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3B & 3H DISCHARGE HEADER DOWNSTREAM CHECK VALVE	32-09J / D-07	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V97	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3C & 3J DISCHARGE HEADER UPSTREAM CHECK VALVE	32-09J / L-02	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
DFR-V98	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMPS 3C & 3J DISCHARGE HEADER DOWNSTREAM CHECK VALVE	32-09J / L-01	C	ACT	3	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	

Valve Summary Listing - Standard Code ISTC Valves

Page 70 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-AOVF041A	RESIDUAL HEAT REMOVAL PUMP A INJECTION LINE TESTABLE CHECK VALVE	27-07A / M-03	A/C	ACT	1	10	CK	SA	C	O/C	N/A	LT	2Y	STP-204-6603	ROJ-006
												RPI	2Y	STP-204-6501	
												CVC	R	STP-204-6603	
												CVO	R	STP-204-6501	
E12-AOVF041B	RESIDUAL HEAT REMOVAL PUMP B INJECTION LINE TESTABLE CHECK VALVE	27-07B / N-04	A/C	ACT	1	10	CK	SA	C	O/C	N/A	LT	2Y	STP-204-6603	ROJ-006
												RPI	2Y	STP-204-6502	
												CVC	R	STP-204-6603	
												CVO	R	STP-204-6502	

Valve Summary Listing - Standard Code ISTC Valves

Page 71 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-AOVF041C	RESIDUAL HEAT REMOVAL PUMP C INJECTION LINE TESTABLE CHECK VALVE	27-07C / K-05	A/C	ACT	1	10	CK	SA	C	O/C	N/A	LT	2Y	STP-204-6603	ROJ-006 ROJ-006
												RPI	2Y	STP-204-6502	
												LTJ	AppJ	STP-204-3815	
												CVC	R	STP-204-6603	
												CVO	R	STP-204-6502	
E12- MOVF003A	RHR HEAT EXCHANGER A OUTLET ISOLATION VALVE	27-07A / L-11	B	ACT	2	14	GL	MO	O	O	FAI	RPI	2Y	STP-204-6601	
												ETO	Q	STP-204-6303	
												STO	Q	STP-204-6303	
E12- MOVF003B	RHR HEAT EXCHANGER B OUTLET ISOLATION VALVE	27-07B / E-06	B	ACT	2	14	GL	MO	O	O	FAI	RPI	2Y	STP-204-6602	
												ETO	Q	STP-204-6304	
												STO	Q	STP-204-6304	

Valve Summary Listing - Standard Code ISTC Valves

Page 72 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOV004A	RESIDUAL HEAT REMOVAL PUMP A SUPPRESSION POOL SUCTION VALVE	27-07A / B-17	B	ACT	2	20	GA	MO	O	O/C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6303	
												ETO	Q	STP-204-6303	
												STC	Q	STP-204-6303	
												STO	Q	STP-204-6303	
E12- MOV004B	RESIDUAL HEAT REMOVAL PUMP B SUPPRESSION POOL SUCTION VALVE	27-07B / B-19	B	ACT	2	20	GA	MO	O	O/C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												ETO	Q	STP-204-6304	
												STC	Q	STP-204-6304	
												STO	Q	STP-204-6304	

Valve Summary Listing - Standard Code ISTC Valves

Page 73 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOV006A	RESIDUAL HEAT REMOVAL PUMP A SHUTDOWN COOLING SUCTION HEADER ISOLATION VALVE	27-07A / B-11	B	ACT	2	16	GA	MO	C	O/C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6303	
												ETO	Q	STP-204-6303	
												STC	Q	STP-204-6303	
												STO	Q	STP-204-6303	
E12- MOV006B	RESIDUAL HEAT REMOVAL PUMP B SHUTDOWN COOLING SUCTION HEADER ISOLATION VALVE	27-07A / D-07	B	ACT	2	16	GA	MO	C	O/C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												ETO	Q	STP-204-6304	
												STC	Q	STP-204-6304	
												STO	Q	STP-204-6304	

Valve Summary Listing - Standard Code ISTC Valves

Page 74 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-MOVF008	RESIDUAL HEAT REMOVAL PUMP SHUTDOWN COOLING OUTBOARD ISOLATION VALVE	27-07A / D-18	A	ACT	1	18	GA	MO	C	O/C	FAI	LT	2Y	STP-204-6603	
												RPI	2Y	STP-204-6801	
												LTJ	AppJ	STP-204-3816	
												ETC	CS	STP-204-6801	CSJ-005
												ETO	CS	STP-204-6801	CSJ-005
												STC	CS	STP-204-6801	CSJ-005
												STO	CS	STP-204-6801	CSJ-005

Valve Summary Listing - Standard Code ISTC Valves

Page 75 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-MOVF009	RESIDUAL HEAT REMOVAL PUMP SHUTDOWN COOLING INBOARD ISOLATION VALVE	27-07A / F-20	A	ACT	1	18	GA	MO	C	O/C	FAI	LT	2Y	STP-204-6603	
												RPI	2Y	STP-204-6801	
												LTJ	AppJ	STP-204-3816	
												ETC	CS	STP-204-6801	CSJ-005
												ETO	CS	STP-204-6801	CSJ-005
												STC	CS	STP-204-6801	CSJ-005
												STO	CS	STP-204-6801	CSJ-005
E12- MOVF011A	RHR HEAT EXCHANGER A DISCHARGE TO THE SUPPRESSION POOL ISOLATION VALVE	27-07A / M-11	B	ACT	2	4	GL	MO	O/C	C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6303	
												STC	Q	STP-204-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 76 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOV011B	RHR HEAT EXCHANGER B DISCHARGE TO THE SUPPRESSION POOL ISOLATION VALVE	27-07B / H-07	B	ACT	2	4	GL	MO	O/C	C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												STC	Q	STP-204-6304	
E12-MOV021	RESIDUAL HEAT REMOVAL PUMP C TEST RETURN TO SUPPRESSION POOL ISOLATION VALVE	27-07C / F-08	B	ACT	2	14	GL	MO	O	C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6302	
												STC	Q	STP-204-6302	
E12-MOV023	RESIDUAL HEAT REMOVAL PUMP HEAD SPRAY ISOLATION VALVE	27-07A / J-20	A	PASS	2	4	GL	H	LC	C	N/A	LTJ	AppJ	STP-107-3806	
E12- MOV024A	RESIDUAL HEAT REMOVAL PUMP A TEST RETURN TO SUPPRESSION POOL ISOLATION VALVE	27-07A / E-18	B	ACT	2	14	BF	MO	C	O/C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6301	
												ETO	Q	STP-204-6301	
												STC	Q	STP-204-6301	
												STO	Q	STP-204-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 77 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOV024B	RESIDUAL HEAT REMOVAL PUMP B TEST RETURN TO SUPPRESSION POOL ISOLATION VALVE	27-07B / L-07	B	ACT	2	14	BF	MO	C	O/C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6302	
												ETO	Q	STP-204-6302	
												STC	Q	STP-204-6302	
												STO	Q	STP-204-6302	
E12- MOV027A	RESIDUAL HEAT REMOVAL PUMP A INJECTION LINE SHUTOFF VALVE	27-07A / M-06	A	ACT	2	10	GA	MO	C	O/C	FAI	RPI	2Y	STP-204-6601	
												LTJ	AppJ	STP-204-3813	
												ETC	Q	STP-204-6303	
												ETO	Q	STP-204-6303	
												STC	Q	STP-204-6303	
												STO	Q	STP-204-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 78 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOV027B	RESIDUAL HEAT REMOVAL PUMP B INJECTION LINE SHUTOFF VALVE	27-07B / M-01	A	ACT	2	10	GA	MO	C	O/C	FAI	RPI	2Y	STP-204-6602	
												LTJ	AppJ	STP-204-3814	
												ETC	Q	STP-204-6304	
												ETO	Q	STP-204-6304	
												STC	Q	STP-204-6304	
												STO	Q	STP-204-6304	
E12- MOV037A	RESIDUAL HEAT REMOVAL PUMP A RETURN TO UPPER POOL ISOLATION VALVE	27-07A / N-05	A	ACT	2	10	GL	MO	C	C	FAI	RPI	2Y	STP-204-6601	
												LTJ	AppJ	STP-204-3813	
												ETC	Q	STP-204-6303	
												STC	Q	STP-204-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 79 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOV037B	RESIDUAL HEAT REMOVAL PUMP B RETURN TO UPPER POOL ISOLATION VALVE	27-07B / N-01	A	ACT	2	10	GL	MO	C	C	FAI	RPI	2Y	STP-204-6602	
												LTJ	AppJ	STP-204-3814	
												ETC	Q	STP-204-6304	
												STC	Q	STP-204-6304	
E12-MOV040	RESIDUAL HEAT REMOVAL PUMP DISCHARGE TO RADWASTE INBOARD ISOLATION VALVE	27-07A / N-18	B	ACT	2	6	GL	MO	O/C	C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6303	
												STC	Q	STP-204-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 80 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOVF042A	RESIDUAL HEAT REMOVAL PUMP A INJECTION RETURN LINE ISOLATION VALVE	27-07A / M-04	A	ACT	1	10	GA	MO	C	O/C	FAI	LT	2Y	STP-204-6603	
												RPI	2Y	STP-204-6801	
												LTJ	AppJ	STP-204-3813	
												ETC	CS	STP-204-6801	CSJ-005
												ETO	CS	STP-204-6801	CSJ-005
												STC	CS	STP-204-6801	CSJ-005
												STO	CS	STP-204-6801	CSJ-005

Valve Summary Listing - Standard Code ISTC Valves

Page 81 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOVF042B	RESIDUAL HEAT REMOVAL PUMP B INJECTION RETURN LINE ISOLATION VALVE	27-07B / N-03	A	ACT	1	10	GA	MO	C	O/C	FAI	LT	2Y	STP-204-6603	
												RPI	2Y	STP-204-6802	
												LTJ	AppJ	STP-204-3814	
												ETC	CS	STP-204-6802	CSJ-005
												ETO	CS	STP-204-6802	CSJ-005
												STC	CS	STP-204-6802	CSJ-005
												STO	CS	STP-204-6802	CSJ-005

Valve Summary Listing - Standard Code ISTC Valves

Page 82 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOV042C	RESIDUAL HEAT REMOVAL PUMP C INJECTION RETURN LINE ISOLATION VALVE	27-07C / K-03	A	ACT	1	10	GA	MO	C	O/C	FAI	LT	2Y	STP-204-6603	CSJ-005
												RPI	2Y	STP-204-6802	
												LTJ	AppJ	STP-204-3815	
												ETC	CS	STP-204-6802	
												ETO	CS	STP-204-6802	
												STC	CS	STP-204-6802	
												STO	CS	STP-204-6802	
E12- MOV047A	RHR HEAT EXCHANGER A SHELL SIDE INLET ISOLATION VALVE	27-07A / H-04	B	ACT	2	14	GA	MO	O/C	O	FAI	RPI	2Y	STP-204-6601	
												ETO	Q	STP-204-6303	
												STO	Q	STP-204-6303	
E12- MOV047B	RHR HEAT EXCHANGER B SHELL SIDE INLET ISOLATION VALVE	27-07B / F-11	B	ACT	2	14	GA	MO	O/C	O	FAI	RPI	2Y	STP-204-6602	
												ETO	Q	STP-204-6304	
												STO	Q	STP-204-6304	

Valve Summary Listing - Standard Code ISTC Valves

Page 83 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOVF048A	RHR HEAT EXCHANGER A SHELL SIDE BYPASS VALVE	27-07A / K-15	B	ACT	2	14	GL	MO	O	O/C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6303	
												ETO	Q	STP-204-6303	
												STC	Q	STP-204-6303	
												STO	Q	STP-204-6303	
E12- MOVF048B	RHR HEAT EXCHANGER B SHELL SIDE BYPASS VALVE	27-07B / G-09	B	ACT	2	14	GL	MO	O	O/C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												ETO	Q	STP-204-6304	
												STC	Q	STP-204-6304	
												STO	Q	STP-204-6304	
E12-MOVF049	RESIDUAL HEAT REMOVAL PUMP DISCHARGE TO RADWASTE OUTBOARD ISOLATION VALVE	27-07A / M-19	B	ACT	2	6	GA	MO	O/C	C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6303	
												STC	Q	STP-204-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 84 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOVF053A	RHR HEAT EXCHANGER A SHUTDOWN COOLING RETURN LINE ISOLATION VALVE	27-07A / G-18	A	ACT	2	10	GL	MO	C	O/C	FAI	RPI	2Y	STP-204-6801	
												LTJ	AppJ	STP-107-3806	
												ETC	CS	STP-204-6801	CSJ-005
												ETO	CS	STP-204-6801	CSJ-005
												STC	CS	STP-204-6801	CSJ-005
												STO	CS	STP-204-6801	CSJ-005
E12- MOVF053B	RHR HEAT EXCHANGER B SHUTDOWN COOLING RETURN LINE ISOLATION VALVE	27-07B / N-09	A	ACT	2	10	GL	MO	C	O/C	FAI	RPI	2Y	STP-204-6802	
												LTJ	AppJ	STP-107-3807	
												ETC	CS	STP-204-6802	CSJ-005
												ETO	CS	STP-204-6802	CSJ-005
												STC	CS	STP-204-6802	CSJ-005
												STO	CS	STP-204-6802	CSJ-005

Valve Summary Listing - Standard Code ISTC Valves

Page 85 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOV064A	RESIDUAL HEAT REMOVAL PUMP A MINIMUM FLOW LINE ISOLATION VALVE	27-07A / E-15	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6303	
												ETO	Q	STP-204-6303	
												STC	Q	STP-204-6303	
												STO	Q	STP-204-6303	
E12- MOV064B	RESIDUAL HEAT REMOVAL PUMP B MINIMUM FLOW LINE ISOLATION VALVE	27-07B / C-15	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												ETO	Q	STP-204-6304	
												STC	Q	STP-204-6304	
												STO	Q	STP-204-6304	
E12- MOV064C	RESIDUAL HEAT REMOVAL PUMP C MINIMUM FLOW LINE ISOLATION VALVE	27-07C / E-10	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												ETO	Q	STP-204-6304	
												STC	Q	STP-204-6304	
												STO	Q	STP-204-6304	

Valve Summary Listing - Standard Code ISTC Valves

Page 86 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12- MOVF068A	RHR HEAT EXCHANGERS A & C SERVICE WATER OUTLET HEADER ISOLATION VALVE	09-10F / K-06	B	ACT	3	18	BF	MO	C	O	FAI	RPI	2Y	STP-256-6603	
												ETO	Q	STP-256-6301	
												STO	Q	STP-256-6301	
E12- MOVF068B	RHR HEAT EXCHANGERS B & D SERVICE WATER OUTLET HEADER ISOLATION VALVE	09-10F / H-03	B	ACT	3	18	BF	MO	C	O	FAI	RPI	2Y	STP-256-6604	
												ETO	Q	STP-256-6302	
												STO	Q	STP-256-6302	
E12- MOVF073A	RHR HEAT EXCHANGER A SECOND VENT VALVE TO SUPPRESSION POOL	27-07A / H-09	B	ACT	2	2	GL	MO	O/C	C	FAI	RPI	2Y	STP-204-6601	
												ETC	Q	STP-204-6303	
												STC	Q	STP-204-6303	
E12- MOVF073B	RHR HEAT EXCHANGER B SECOND VENT VALVE TO SUPPRESSION POOL	27-07B / E-10	B	ACT	2	2	GL	MO	O/C	C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												STC	Q	STP-204-6304	
E12-MOVF094	RHR HEAT EXCHANGER SERVICE WATER BYPASS VALVE	27-07B / G-03	B	PASS	3	10	GA	MO	C	C	FAI	RPI	2Y	STP-204-6602	

Valve Summary Listing - Standard Code ISTC Valves

Page 87 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-MOVF096	RHR HEAT EXCHANGER SERVICE WATER BYPASS VALVE	27-07B / G-04	B	PASS	2	10	GA	MO	C	C	FAI	RPI	2Y	STP-204-6602	
E12-MOVF105	RESIDUAL HEAT REMOVAL PUMP C SUPPRESSION POOL SUCTION VALVE	27-07C / B-20	B	ACT	2	20	GA	MO	O	O/C	FAI	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												ETO	Q	STP-204-6304	
												STC	Q	STP-204-6304	
												STO	Q	STP-204-6304	
E12-RVF005	RESIDUAL HEAT REMOVAL PUMP A SHUTDOWN COOLING SUCTION PRESSURE RELIEF VALVE	27-07A / B-11	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-RVF017A	RESIDUAL HEAT REMOVAL PUMP A SUCTION HEADER PRESSURE RELIEF VALVE	27-07A / B-15	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-RVF017B	RESIDUAL HEAT REMOVAL PUMP B SUCTION HEADER PRESSURE RELIEF VALVE	27-07B / C-18	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-RVF025A	RESIDUAL HEAT REMOVAL PUMP A SHUTDOWN COOLING RETURN PRESSURE RELIEF VALVE	27-07A / F-16	C	ACT	2	1.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-RVF025B	RESIDUAL HEAT REMOVAL PUMP B SHUTDOWN COOLING RETURN PRESSURE RELIEF VALVE	27-07B / G-15	C	ACT	2	1.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 88 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-RVF025C	RESIDUAL HEAT REMOVAL PUMP C SHUTDOWN COOLING RETURN PRESSURE RELIEF VALVE	27-07C / G-06	C	ACT	2	1.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-RVF030	RESIDUAL HEAT REMOVAL PUMP B DISCHARGE HEADER FLUSH LINE PRESSURE RELIEF VALVE	27-07B / B-15	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-RVF100A	RHR HEAT EXCHANGER C SERVICE WATER OUTLET LINE PRESSURE RELIEF VALVE	09-10F / J-06	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-RVF100B	RHR HEAT EXCHANGER D SERVICE WATER OUTLET LINE PRESSURE RELIEF VALVE	09-10F / J-03	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-RVF101	RESIDUAL HEAT REMOVAL PUMP C SUCTION HEADER PRESSURE RELIEF VALVE	27-07C / J-12	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E12-SOVF060A	RHR HEAT EXCHANGER A SAMPLING TURBINE SYSTEM ISOLATION VALVE	27-07A / L-08	B	ACT	2	0.75	GL	SO	O/C	C	C	RPI	2Y	STP-204-6605	
												ETC	Q	STP-204-6303	
												FSC	Q	STP-204-6303	
												STC	Q	STP-204-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 89 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-SOVF060B	RHR HEAT EXCHANGER B SAMPLING TURBINE SYSTEM ISOLATION VALVE	27-07B / D-05	B	ACT	2	0.75	GL	SO	O/C	C	C	RPI	2Y	STP-204-6606	
												ETC	Q	STP-204-6304	
												FSC	Q	STP-204-6304	
												STC	Q	STP-204-6304	
E12-SOVF075A	RHR HEAT EXCHANGER A SAMPLING TURBINE SYSTEM ISOLATION VALVE	27-07A / M-08	B	ACT	2	0.75	GL	SO	O/C	C	C	RPI	2Y	STP-204-6605	
												ETC	Q	STP-204-6303	
												FSC	Q	STP-204-6303	
												STC	Q	STP-204-6303	
E12-SOVF075B	RHR HEAT EXCHANGER B SAMPLING TURBINE SYSTEM ISOLATION VALVE	27-07B / D-05	B	ACT	2	0.75	GL	SO	O/C	C	C	RPI	2Y	STP-204-6606	
												ETC	Q	STP-204-6304	
												FSC	Q	STP-204-6304	
												STC	Q	STP-204-6304	
E12-VF010	RESIDUAL HEAT REMOVAL PUMP SHUTDOWN COOLING INLET VALVE	27-07C / H-07	B	PASS	1	18	GA	H	LO	O	N/A	RPI	2Y	STP-204-6604	
E12-VF031A	RESIDUAL HEAT REMOVAL PUMP A DISCHARGE HEADER CHECK VALVE	27-07A / D-14	C	ACT	2	14	CK	SA	C	O/C	N/A	CVC	Q	STP-205-6301	
												CVO	Q	STP-205-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 90 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-VF031B	RESIDUAL HEAT REMOVAL PUMP B DISCHARGE HEADER CHECK VALVE	27-07B / B-13	C	ACT	2	14	CK	SA	C	O/C	N/A	CVC	Q	STP-204-6302	
												CVO	Q	STP-204-6302	
E12-VF031C	RESIDUAL HEAT REMOVAL PUMP C DISCHARGE HEADER CHECK VALVE	27-07C / D-11	C	ACT	2	14	CK	SA	C	O/C	N/A	CVC	Q	STP-204-6302	
												CVO	Q	STP-204-6302	
E12-VF039A	RESIDUAL HEAT REMOVAL PUMP A INJECTION LINE MANUAL ISOLATION VALVE	27-07A / N-02	B	PASS	1	10	GA	H	LO	O	N/A	RPI	2Y	STP-204-6801	
E12-VF039B	RESIDUAL HEAT REMOVAL PUMP B INJECTION LINE MANUAL ISOLATION VALVE	27-07B / N-05	B	PASS	1	10	GA	H	LO	O	N/A	RPI	2Y	STP-204-6802	
E12-VF039C	RESIDUAL HEAT REMOVAL PUMP C INJECTION LINE MANUAL ISOLATION VALVE	27-07C / K-07	B	PASS	1	10	GA	H	LO	O	N/A	RPI	2Y	STP-204-6802	
E12-VF044A	RHR RETURN LINE TO UPPER POOL FILL LINE {FROM CONDENSATE} ISOLATION VALVE A	04-03C / J-20	A	PASS	2	4	GA	H	LC	C	N/A	LTJ	AppJ	STP-204-3813	
E12-VF044B	RHR RETURN LINE TO UPPER POOL FILL LINE {FROM CONDENSATE} ISOLATION VALVE B	04-03C / K-20	A	PASS	2	4	GA	H	LC	C	N/A	LTJ	AppJ	STP-204-3814	
E12-VF046A	RESIDUAL HEAT REMOVAL PUMP A MINIMUM FLOW LINE CHECK VALVE	27-07A / F-15	C	ACT	2	4	CK	SA	C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-204-6301	
E12-VF046B	RESIDUAL HEAT REMOVAL PUMP B MINIMUM FLOW LINE CHECK VALVE	27-07B / D-15	C	ACT	2	4	CK	SA	C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-204-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 91 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-VF046C	RESIDUAL HEAT REMOVAL PUMP C MINIMUM FLOW LINE CHECK VALVE	27-07C / E-09	C	ACT	2	4	CK	SA	C	O	N/A	BDC CVO	CM CM	STP-000-6602 STP-204-6302	
E12-VF050A	RESIDUAL HEAT REMOVAL PUMP A SHUTDOWN COOLING RETURN LINE CHECK VALVE	27-07A / H-18	C	ACT	2	10	CK	SA	C	O/C	N/A	CVC CVO	CM CM	STP-204-6501 STP-204-6502	
E12-VF050B	RESIDUAL HEAT REMOVAL PUMP B SHUTDOWN COOLING RETURN LINE CHECK VALVE	27-07B / N-09	C	ACT	2	10	CK	SA	C	O/C	N/A	CVC CVO	CM CM	STP-204-6502 STP-204-6501	
E12-VF084A	RESIDUAL HEAT REMOVAL PUMP A LPCS FILL PUMP FILL LINE CHECK VALVE	27-07A / E-13	C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	CVC CVO	Q Q	STP-205-6301 STP-205-6301	
E12-VF084B	RESIDUAL HEAT REMOVAL PUMP B LPCS FILL PUMP FILL LINE CHECK VALVE	27-07B / B-14	C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	CVC CVO	Q Q	STP-204-6302 STP-204-6302	
E12-VF084C	RESIDUAL HEAT REMOVAL PUMP C LPCS FILL PUMP FILL LINE CHECK VALVE	27-07C / E-13	C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	CVC CVO	Q Q	STP-204-6302 STP-204-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 92 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E12-VF085A	RESIDUAL HEAT REMOVAL PUMP A LPCS FILL PUMP FILL LINE STOP CHECK VALVE	27-07A / E-13	C	ACT	2	1.5	SCK	SA	O/C	O/C	N/A	CVC	Q	STP-205-6301	
												CVO	Q	STP-205-6301	
E12-VF085B	RESIDUAL HEAT REMOVAL PUMP B LPCS FILL PUMP FILL LINE STOP CHECK VALVE	27-07B / B-13	C	ACT	2	1.5	SCK	SA	O/C	O/C	N/A	CVC	Q	STP-204-6302	
												CVO	Q	STP-204-6302	
E12-VF085C	RESIDUAL HEAT REMOVAL PUMP C LPCS FILL PUMP FILL LINE STOP CHECK VALVE	27-07C / E-12	C	ACT	2	1.5	SCK	SA	O/C	O/C	N/A	CVC	Q	STP-204-6302	
												CVO	Q	STP-204-6302	
E12-VF099A	RESIDUAL HEAT REMOVAL PUMP A RETURN TO FUEL STORAGE AREA	27-07A / N-05	A	PASS	2	8	GL	H	C	C	N/A	LTJ	AppJ	STP-204-3813	
E12-VF099B	RESIDUAL HEAT REMOVAL PUMP B RETURN TO FUEL STORAGE AREA	27-07B / P-02	A	PASS	2	8	GL	H	C	C	N/A	LTJ	AppJ	STP-204-3814	
E12-VF102	RCIC VACUUM BRKR LINE ISOL	27-07B / J-17	A	PASS	2	0.75	GL	H	LC	C	N/A	LTJ	AppJ	STP-209-3819	

Valve Summary Listing - Standard Code ISTC Valves

Page 93 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E21-AOVF006	LOW PRESSURE CORE SPRAY PUMP INJECTION INSIDE DRYWELL CHECK VALVE	27-05A / M-08	A/C	ACT	1	10	CK	SA	C	O/C	N/A	LT	2Y	STP-205-6603	ROJ-006
												RPI	2Y	STP-204-6501	
												LTJ	AppJ	STP-205-3817	
												CVC	R	STP-205-6603	
												CVO	R	STP-204-6501	
E21-MOVF001	LOW PRESSURE CORE SPRAY PUMP SUPPRESSION POOL SUCTION VALVE	27-05A / C-11	B	ACT	2	20	GA	MO	O	O/C	FAI	RPI	2Y	STP-205-6601	
												ETC	Q	STP-205-6301	
												ETO	Q	STP-205-6301	
												STC	Q	STP-205-6301	
												STO	Q	STP-205-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 94 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E21-MOVF005	LOW PRESSURE CORE SPRAY PUMP LPCS INJECTION SHUT OFF VALVE	27-05A / M-12	A	ACT	1	10	GA	MO	C	O/C	FAI	LT	2Y	STP-205-6603	CSJ-005
												RPI	2Y	STP-204-6801	
												LTJ	AppJ	STP-205-3817	
												ETC	CS	STP-204-6801	
												ETO	CS	STP-204-6801	
												STC	CS	STP-204-6801	
												STO	CS	STP-204-6801	
E21-MOVF011	LOW PRESSURE CORE SPRAY PUMP MINIMUM FLOW TO SUPPRESSION POOL ISOL VALVE	27-05A / H-16	B	ACT	2	4	GA	MO	C	O/C	FAI	RPI	2Y	STP-205-6601	
												ETC	Q	STP-205-6301	
												ETO	Q	STP-205-6301	
												STC	Q	STP-205-6301	
												STO	Q	STP-205-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 95 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E21-MOVF012	LOW PRESSURE CORE SPRAY PUMP DISCHARGE HEADER RETURN TO SUPPR POOL ISOL VALVE	27-05A / K-15	B	ACT	2	10	GL	MO	C	C	FAI	RPI	2Y	STP-205-6601	
												ETC	Q	STP-205-6301	
												STC	Q	STP-205-6301	
E21-RVF018	LOW PRESSURE CORE SPRAY PUMP DISCHARGE LINE FLUSH CONNECTION PRESS RELIEF VALVE	27-05A / K-13	C	ACT	2	1.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E21-RVF031	LOW PRESSURE CORE SPRAY PUMP SUCTION HEADER PRESSURE RELIEF VALVE	27-05A / D-12	C	ACT	2	1.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E21-VF003	LOW PRESSURE CORE SPRAY PUMP DISCHARGE CHECK VALVE	27-05A / J-21	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC	Q	STP-205-6301	
												CVO	Q	STP-205-6301	
E21-VF007	LOW PRESSURE CORE SPRAY PUMP INJECTION INSIDE DRYWELL MANUAL SHUTOFF VALVE	27-05A / M-06	B	PASS	1	10	GA	H	LO	O	N/A	RPI	2Y	STP-204-6801	
E21-VF033	LPCS DISCHARGE LINE FILL PUMP DISCHARGE CHECK VALVE	27-05A / G-17	C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	CVC	Q	STP-205-6301	
												CVO	Q	STP-205-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 96 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E22-AOVF005	HIGH PRESSURE CORE SPRAY PUMP DISCHARGE HEADER CHECK VALVE INSIDE DRYWELL	27-04A / H-05	A/C	ACT	1	10	CK	SA	C	O/C	N/A	LT	2Y	STP-203-6603	ROJ-006
												LTJ	AppJ	STP-203-3812	
												CVC	R	STP-203-6603	
												CVO	R	STP-203-6603	
E22-MOVF001	HIGH PRESSURE CORE SPRAY PUMP CONDENSATE STORE TANK SUCT HEADER ISOLATION VALVE	27-04A / H-19	B	ACT	2	16	GA	MO	O	O/C	FAI	RPI	2Y	STP-203-6605	
												ETC	Q	STP-203-6305	
												ETO	Q	STP-203-6305	
												STC	Q	STP-203-6305	
												STO	Q	STP-203-6305	

Valve Summary Listing - Standard Code ISTC Valves

Page 97 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E22-MOVF004	HIGH PRESSURE CORE SPRAY PUMP DISCHARGE LINE MAIN ISOLATION VALVE	27-04A / H-08	A	ACT	1	10	GA	MO	C	O/C	FAI	LT	2Y	STP-203-6603	
												RPI	2Y	STP-203-6805	
												LTJ	AppJ	STP-203-3812	
												ETC	CS	STP-203-6805	CSJ-005
												ETO	CS	STP-203-6805	CSJ-005
												STC	CS	STP-203-6805	CSJ-005
												STO	CS	STP-203-6805	CSJ-005
E22-MOVF010	HIGH PRESSURE CORE SPRAY PUMP TEST RETURN LINE TO CST ISOLATION VALVE	27-04A / L-10	A	ACT	2	10	GL	MO	C	C	FAI	RPI	2Y	STP-203-6605	
												LT	2Y	STP-203-6604	
												ETC	Q	STP-203-6305	
												STC	Q	STP-203-6305	

Valve Summary Listing - Standard Code ISTC Valves

Page 98 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E22-MOVF011	HIGH PRESSURE CORE SPRAY PUMP TEST RETURN LINE TO CST ISOLATION VALVE	27-04A / N-12	A	ACT	2	10	GL	MO	C	C	FAI	RPI	2Y	STP-203-6605	
												LT	2Y	STP-203-6604	
												ETC	Q	STP-203-6305	
												STC	Q	STP-203-6305	
E22-MOVF012	HIGH PRESSURE CORE SPRAY PUMP DISCHARGE MINIMUM FLOW LINE ISOLATION VALVE	27-04A / F-14	B	ACT	2	4	GA	MO	C	O/C	FAI	RPI	2Y	STP-203-6605	
												ETC	Q	STP-203-6305	
												ETO	Q	STP-203-6305	
												STC	Q	STP-203-6305	
												STO	Q	STP-203-6305	

Valve Summary Listing - Standard Code ISTC Valves

Page 99 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E22-MOVF015	HIGH PRESSURE CORE SPRAY PUMP SUPPRESSION POOL SUCTION HEADER ISOLATION VALVE	27-04A / A-09	B	ACT	2	20	GA	MO	C	O/C	FAI	RPI	2Y	STP-203-6605	
												ETC	Q	STP-203-6305	
												ETO	Q	STP-203-6305	
												STC	Q	STP-203-6305	
												STO	Q	STP-203-6305	
E22-MOVF023	HIGH PRESSURE CORE SPRAY PUMP TEST RETURN LINE TO SUPPR POOL ISOLATION VALVE	27-04A / F-10	B	ACT	2	10	GL	MO	C	C	FAI	RPI	2Y	STP-203-6605	
												ETC	Q	STP-203-6305	
												STC	Q	STP-203-6305	
E22-RVF014	HPCS PUMP DISCHARGE LINE FILL PUMP SUCTION HEADER PRESSURE RELIEF VALVE	27-04A / B-17	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E22-RVF035	HPCS PUMP DISCHARGE LINE FILL PUMP DISCHARGE HEADER PRESSURE RELIEF VALVE	27-04A / K-13	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E22-RVF039	HIGH PRESSURE CORE SPRAY PUMP TEST RETURN LINE TO CST PRESSURE RELIEF VALVE	27-04A / M-11	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 100 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E22-VF002	HIGH PRESSURE CORE SPRAY PUMP CONDENSATE STORE TANK SUCT HEADER CHECK VALVE	27-04A / K-19	C	ACT	2	16	CK	SA	C	O/C	N/A	CVC	CM	STP-203-6501	
												CVO	CM	STP-203-6501	
E22-VF007	HPCS PUMP DISCHARGE LINE FILL PUMP DISCHARGE HEADER CHECK VALVE	27-04A / D-15	C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	CVC	Q	STP-203-6305	
												CVO	Q	STP-203-6305	
E22-VF016	HIGH PRESSURE CORE SPRAY PUMP SUPRA POOL SUCTION HEADER CHECK VALVE	27-04A / A-11	C	ACT	2	20	CK	SA	C	O	N/A	BDC	CM	STP-203-6501	
												CVO	CM	STP-203-6501	
E22-VF024	HIGH PRESSURE CORE SPRAY PUMP DISCHARGE HEADER CHECK VALVE	27-04A / H-14	C	ACT	2	14	CK	SA	C	O/C	N/A	CVC	Q	STP-203-6305	
												CVO	Q	STP-203-6305	
E22-VF036	HIGH PRESSURE CORE SPRAY PUMP DISCHARGE HEADER TO REACTOR MANUAL ISOL VALVE	27-04A / H-04	B	PASS	1	10	GA	H	LO	O	N/A	RPI	2Y	STP-203-6805	

Valve Summary Listing - Standard Code ISTC Valves

Page 101 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E33-MOVF005	INBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER INJECTION VALVE	27-20A / M-16	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-208-6607	
												ETC	Q	STP-208-6301	
												ETO	Q	STP-208-6301	
												STC	Q	STP-208-6301	
												STO	Q	STP-208-6301	
E33-MOVF006	INBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER DRAIN LINE ISOL VALVE	27-20A / L-16	B	ACT	2	2	GL	MO	O	C	FAI	RPI	2Y	STP-208-6607	
												ETC	Q	STP-208-6301	
												STC	Q	STP-208-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 102 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E33-MOVF007	INBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER ISOLATION VALVE	27-20A / L-15	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-208-6607	
												ETC	Q	STP-208-6301	
												ETO	Q	STP-208-6301	
												STC	Q	STP-208-6301	
												STO	Q	STP-208-6301	
E33-MOVF008	INBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER ISOLATION VALVE	27-20A / K-15	B	ACT	1	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-208-6607	
												ETC	Q	STP-208-6301	
												ETO	Q	STP-208-6301	
												STC	Q	STP-208-6301	
												STO	Q	STP-208-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 103 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E33-MOVF025	OUTBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER INJECTION VALVE	27-20A / M-08	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-208-6608	
												ETC	Q	STP-208-6302	
												ETO	Q	STP-208-6302	
												STC	Q	STP-208-6302	
												STO	Q	STP-208-6302	
E33-MOVF026	OUTBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER DRAIN LINE ISOL VALVE	27-20A / L-07	B	ACT	2	2	GL	MO	O	C	FAI	RPI	2Y	STP-208-6608	
												ETC	Q	STP-208-6302	
												STC	Q	STP-208-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 104 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E33-MOVF027	OUTBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER ISOLATION VALVE	27-20A / L-06	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-208-6608	
												ETC	Q	STP-208-6302	
												ETO	Q	STP-208-6302	
												STC	Q	STP-208-6302	
												STO	Q	STP-208-6302	
E33-MOVF028	OUTBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER ISOLATION VALVE	27-20A / L-06	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-208-6608	
												ETC	Q	STP-208-6302	
												ETO	Q	STP-208-6302	
												STC	Q	STP-208-6302	
												STO	Q	STP-208-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 105 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E33-PVF002	INBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER PRESSURE CONTROL VALVE	27-20A / M-18	B	ACT	2	2	GL	HO	O/C	C	C	ETC	Q	STP-208-6301	
												FSC	Q	STP-208-6301	
												STC	Q	STP-208-6301	
E33-PVF022	OUTBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER PRESSURE CONTROL VALVE	27-20A / M-09	B	ACT	2	2	GL	HO	O/C	C	C	ETC	Q	STP-208-6302	
												FSC	Q	STP-208-6302	
												STC	Q	STP-208-6302	
E33-RVF003	INBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER PRESSURE RELIEF VALVE	27-20A / M-17	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E33-RVF023	OUTBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER PRESSURE RELIEF VALVE	27-20A / M-09	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 106 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E33-SOVF014	INBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER PRESS CNTRL VLV BYPASS VALVE	27-20A / L-18	B	ACT	2	2	GL	SO	C	O/C	C	RPI	2Y	STP-208-6607	
												ETC	Q	STP-208-6301	
												ETO	Q	STP-208-6301	
												FSC	Q	STP-208-6301	
												STC	Q	STP-208-6301	
												STO	Q	STP-208-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 107 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E33-SOVF034	OUTBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER PRESS CNTRL VLV BYPASS VALVE	27-20A / L-09	B	ACT	2	2	GL	SO	C	O/C	C	RPI	2Y	STP-208-6608	
												ETC	Q	STP-208-6302	
												ETO	Q	STP-208-6302	
												FSC	Q	STP-208-6302	
												STC	Q	STP-208-6302	
												STO	Q	STP-208-6302	
E33-VF004	INBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER INLET CHECK VALVE	27-20A / M-17	C	ACT	2	2	CK	SA	C	O	N/A	BDC	CM	STP-208-6501	
												CVO	CM	STP-208-6501	
E33-VF024	OUTBOARD MSIVS POSITIVE LEAKAGE CONTROL AIR SUPPLY HEADER INLET CHECK VALVE	27-20A / M-08	C	ACT	2	2	CK	SA	C	O	N/A	BDC	CM	STP-000-6801	
												CVO	CM	STP-000-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 108 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-AOVF004	REACTOR CORE ISOL COOLING TURBINE EXHAUST LINE DRAIN POT AOV ISOLATION VALVE	32-09J / K-09	B	ACT	2	1	GL	AO	O	C	C	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												FSC	Q	STP-209-6310	
												STC	Q	STP-209-6310	
E51-AOVF005	REACTOR CORE ISOL COOLING TURBINE EXHAUST LINE DRAIN POT AOV ISOLATION VALVE	32-09J / K-09	B	ACT	2	1	GL	AO	O	C	C	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												FSC	Q	STP-209-6310	
												STC	Q	STP-209-6310	

Valve Summary Listing - Standard Code ISTC Valves

Page 109 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-AOVF025	REACTOR CORE ISOL COOLING STEAM SUPPLY DRAIN POT AOV ISOLATION VALVE	32-05B / D-18	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												FSC	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	
E51-AOVF026	REACTOR CORE ISOL COOLING STEAM SUPPLY DRAIN POT AOV ISOLATION VALVE	32-05B / C-18	B	ACT	2	1	GL	AO	O	O/C	C	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												FSC	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	

Valve Summary Listing - Standard Code ISTC Valves

Page 110 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-AOVF054	REACTOR CORE ISOL COOLING STEAM SUPPLY DRAIN POT BYPASS AOV ISOLATION VALVE	32-05B / B-18	B	ACT	2	1	GL	AO	C	O/C	C	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												FSC	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	
E51-MOVC002	REACTOR CORE ISOL COOLING TURBINE STEAM TRIP & THROTTLE VALVE	27-06A / K-08	B	ACT	2	4	GA	MO	O	O/C	FAI	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	

Valve Summary Listing - Standard Code ISTC Valves

Page 111 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-MOVF010	REACTOR CORE ISOL COOLING PUMP SUCTION VALVE FROM CONDENSATE STORAGE TANK	27-06A / B-13	B	ACT	2	6	GA	MO	O	O/C	FAI	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	
E51-MOVF013	REACTOR CORE ISOL COOLING PUMP INJECTION ISOLATION VALVE	27-06A / N-11	A	ACT	2	6	GA	MO	C	O/C	FAI	RPI	2Y	STP-209-6800	
												LTJ	AppJ	STP-107-3806	
												ETC	CS	STP-209-6800	
												ETO	CS	STP-209-6800	
												STC	CS	STP-209-6800	
												STO	CS	STP-209-6800	

Valve Summary Listing - Standard Code ISTC Valves

Page 112 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-MOVF019	REACTOR CORE ISOL COOLING PUMP MINIMUM FLOW TO SUPPRESSION POOL ISOL VALVE	27-06A / M-13	B	ACT	2	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	
E51-MOVF022	REACTOR CORE ISOL COOLING PUMP TEST FLOW CONTROL VALVE TO COND STORAGE TANK	27-06A / L-07	A	ACT	2	4	GL	MO	O/C	C	FAI	RPI	2Y	STP-209-6601	
												LT	2Y	STP-203-6604	
												ETC	Q	STP-209-6310	
												STC	Q	STP-209-6310	

Valve Summary Listing - Standard Code ISTC Valves

Page 113 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-MOVF031	REACTOR CORE ISOL COOLING PUMP SUCTION VALVE FROM THE SUPPRESSION POOL	27-06A / A-13	B	ACT	2	6	GA	MO	C	O/C	FAI	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	
E51-MOVF045	REACTOR CORE ISOL COOLING TURBINE STEAM SUPPLY ISOLATION VALVE	27-06A / K-08	B	ACT	2	4	GL	MO	C	O/C	FAI	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	

Valve Summary Listing - Standard Code ISTC Valves

Page 114 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-MOVF059	REACTOR CORE ISOL COOLING PUMP TEST RETURN ISOLATION VALVE TO CST	27-06A / L-05	A	ACT	2	4	GA	MO	O/C	C	FAI	LT	2Y	STP-203-6604	
												RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												STC	Q	STP-209-6310	
E51-MOVF063	RCIC & RHR SYSTEMS STEAM SUPPLY ISOLATION VALVE	27-06A / K-15	A	ACT	1	8	GA	MO	O	O/C	FAI	RPI	2Y	STP-209-6800	
												LTJ	AppJ	STP-209-3818	
												ETC	CS	STP-209-6800	
												ETO	CS	STP-209-6800	
												STC	CS	STP-209-6800	
												STO	CS	STP-209-6800	

Valve Summary Listing - Standard Code ISTC Valves

Page 115 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-MOVF064	REACTOR CORE ISOL COOLING STEAM SUPPLY LINE OUTBOARD CONTAINMENT ISOLATION VALVE	27-06A / K-13	A	ACT	1	8	GA	MO	O	O/C	FAI	RPI	2Y	STP-209-6800	CSJ-008
												LTJ	AppJ	STP-209-3818	
												ETC	CS	STP-209-6800	
												ETO	CS	STP-209-6800	
												STC	CS	STP-209-6800	
												STO	CS	STP-209-6800	
E51-MOVF068	REACTOR CORE ISOL COOLING TURBINE EXHAUST ISOLATION VALVE TO SUPPRESSION POOL	27-06A / F-11	B	ACT	2	12	GA	MO	O	O/C	FAI	RPI	2Y	STP-209-6601	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	

Valve Summary Listing - Standard Code ISTC Valves

Page 116 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-MOVF076	REACTOR CORE ISOL COOLING WARM-UP LINE ISOLATION VALVE	27-06A / J-15	A	ACT	2	0.75	GL	MO	C	C	FAI	RPI	2Y	STP-209-6800	CSJ-008 CSJ-008
												LTJ	AppJ	STP-209-3818	
												ETC	CS	STP-209-6800	
												STC	CS	STP-209-6800	
E51-MOVF077	REACTOR CORE ISOL COOLING VACUUM BREAKER ISOLATION VALVE	27-06A / G-11	A	ACT	2	1.5	GL	MO	O	O/C	FAI	RPI	2Y	STP-209-6601	
												LTJ	AppJ	STP-209-3819	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	

Valve Summary Listing - Standard Code ISTC Valves

Page 117 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-MOVF078	REACTOR CORE ISOL COOLING VACUUM BREAKER CONTAINMENT ISOLATION VALVE	27-06A / G-13	A	ACT	2	2.5	GL	MO	O	O/C	FAI	RPI	2Y	STP-209-6601	
												LTJ	AppJ	STP-209-3819	
												ETC	Q	STP-209-6310	
												ETO	Q	STP-209-6310	
												STC	Q	STP-209-6310	
												STO	Q	STP-209-6310	
E51-PSED001	REACTOR CORE ISOL COOLING EXHAUST LINE UPSTREAM RUPTURE DISC	27-06A / G-05	D	ACT	2	12	RD	SA	C	O/C	N/A	RD	5Y	PMID 50034478	
E51-PSED002	REACTOR CORE ISOL COOLING EXHAUST LINE DOWNSTREAM RUPTURE DISC	27-06A / G-04	D	ACT	2	12	RD	SA	C	O/C	N/A	RD	5Y	PMID 50034478	
E51-RVF017	REACTOR CORE ISOL COOLING PUMP SUCTION HEADER PRESSURE RELIEF VALVE	27-06A / M-02	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E51-RVF018	REACTOR CORE ISOL COOLING TURBINE LUBE OIL COOLER INLET PRESSURE RELIEF VALVE	27-06A / P-02	C	ACT	2	1.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
E51-RVF090	REACTOR CORE ISOL COOLING PUMP TEST LINE PRESSURE RELIEF VALVE	27-06A / M-07	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 118 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
E51-VF011	REACTOR CORE ISOL COOLING PUMP SUCTION LINE CHECK VALVE	27-06A / B-09	C	ACT	2	6	CK	SA	C	O/C	N/A	CVC	Q	STP-209-6310	
												CVO	Q	STP-209-6310	
E51-VF030	REACTOR CORE ISOL COOLING PUMP SUCTION LINE CHECK VALVE	27-06A / A-11	C	ACT	2	6	CK	SA	C	O/C	N/A	CVC	CM	STP-000-6617	
												CVO	CM	STP-000-6617	
E51-VF040	REACTOR CORE ISOL COOLING EXHAUST LINE CHECK VALVE	27-06A / F-10	C	ACT	2	12	CK	SA	C	O/C	N/A	CVC	CM	STP-000-6617	
												CVO	CM	STP-000-6617	
E51-VF061	REACTOR CORE ISOL COOLING SUB SYSTEM FILL PUMP DISCHARGE CHECK VALVE	27-06A / C-09	C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	CVC	CM	STP-209-6310	
												CVO	CM	STP-209-6310	
E51-VF079	REACTOR CORE ISOL COOLING EXHAUST VACUUM BREAKER CHECK VALVE	27-06A / G-11	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CVC	CM	STP-209-6310	
												CVO	CM	STP-209-6310	
E51-VF081	REACTOR CORE ISOL COOLING EXHAUST VACUUM BREAKER CHECK VALVE	27-06A / G-12	C	ACT	2	1.5	CK	SA	C	O/C	N/A	CVC	CM	STP-209-6310	
												CVO	CM	STP-209-6310	
EGA-RV5A	DIESEL GENERATOR AIR START SYS AIR RECEIVER TANK 1A PRESSURE RELIEF VALVE	08-09B / J-13	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 119 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
EGA-RV5B	DIESEL GENERATOR AIR START SYS AIR RECEIVER TANK 1B PRESSURE RELIEF VALVE	08-09B / C-13	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
EGA-RV6C	DIESEL GENERATOR AIR START SYS AIR RECEIVER TANK 2C PRESSURE RELIEF VALVE	08-09B / N-10	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
EGA-RV6D	DIESEL GENERATOR AIR START SYS AIR RECEIVER TANK 2D PRESSURE RELIEF VALVE	08-09B / G-01	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
EGA-V102	DIESEL GENERATOR AIR START SYS DESICCANT DRYER 1A OUTLET LINE TO AIR RECEIVER CHECK VALVE	08-09B / J-12	C	ACT	3	1.5	CK	SA	O/C	C	N/A	BDO	Q	STP-000-6501	
												CVC	Q	STP-309-6307	
EGA-V115	DIESEL GENERATOR AIR START SYS DESICCANT DRYER 2A OUTLET LINE TO AIR RECEIVER CHECK VALVE	08-09B / M-12	C	ACT	3	1.5	CK	SA	O/C	C	N/A	BDO	Q	STP-000-6501	
												CVC	Q	STP-309-6304	
EGA-V126	DIESEL GENERATOR AIR START SYS DESICCANT DRYER 1B OUTLET LINE TO AIR RECEIVER CHECK VALVE	08-09B / B-12	C	ACT	3	1.5	CK	SA	O/C	C	N/A	BDO	Q	STP-000-6501	
												CVC	Q	STP-309-6308	

Valve Summary Listing - Standard Code ISTC Valves

Page 120 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
EGA-V137	DIESEL GENERATOR AIR START SYS DESICCANT DRYER 2B OUTLET LINE TO AIR RECEIVER CHECK VALVE	08-09B / F-12	C	ACT	3	1.5	CK	SA	O/C	C	N/A	BDO	Q	STP-000-6501	
												CVC	Q	STP-309-6305	
EGA-V147	STANDBY DIESEL GENERATOR A AIR START SUPPLY LINE {FROM AIR COMPRESSOR 2A} INLET CHECK VLV	08-09B / M-08	C	ACT	3	6	CK	SA	C	O/C	N/A	CVC	CM	STP-000-6601	
												CVO	CM	STP-309-6304	
EGA-V148	STANDBY DIESEL GENERATOR A AIR START SUPPLY LINE {FROM AIR COMPRESSOR 1A} INLET CHECK VLV	08-09B / L-08	C	ACT	3	6	CK	SA	C	O/C	N/A	CVC	CM	STP-000-6601	
												CVO	CM	STP-309-6307	
EGA-V151	STANDBY DIESEL GENERATOR B AIR START SUPPLY LINE {FROM AIR COMPRESSOR 2B} INLET CHECK VLV	08-09B / E-08	C	ACT	3	6	CK	SA	C	O/C	N/A	CVC	CM	STP-000-6602	
												CVO	CM	STP-309-6305	

Valve Summary Listing - Standard Code ISTC Valves

Page 121 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
EGA-V152	STANDBY DIESEL GENERATOR B AIR START SUPPLY LINE {FROM AIR COMPRESSOR 1B} INLET CHECK VLV	08-09B / D-08	C	ACT	3	6	CK	SA	C	O/C	N/A	CVC	CM	STP-000-6602	
												CVO	CM	STP-309-6308	
EGF-RV3A	STANDBY DIESEL GENERATOR A ENGINE MOUNTED FUEL TRANSFER PUMP DISCH RELIEF VLV	08-09A / M-02	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
EGF-RV3B	STANDBY DIESEL GENERATOR B ENGINE MOUNTED FUEL TRANSFER PUMP DISCH RELIEF VLV	08-09A / H-02	C	ACT	3	1	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
EGF-V3	STANDBY DIESEL GENERATOR FUEL OIL TRANSFER PUMP A DISCHARGE CHECK VALVE	08-09A / M-14	C	ACT	3	2	CK	SA	C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-309-6301	
EGF-V33	STANDBY DIESEL GENERATOR FUEL OIL TRANSFER PUMP B DISCHARGE CHECK VALVE	08-09A / J-14	C	ACT	3	2	CK	SA	C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-309-6302	
EGF-V63	STANDBY DIESEL GENERATOR FUEL OIL TRANSFER PUMP C DISCHARGE CHECK VALVE	08-09A / E-14	C	ACT	3	2	CK	SA	C	O	N/A	BDC	CM	STP-000-6610	
												CVO	CM	STP-309-6315	

Valve Summary Listing - Standard Code ISTC Valves

Page 122 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
FPW-MOV121	REACTOR BUILDING FIRE PROTECTION HEADER CONTAINMENT ISOLATION VALVE	15-01C / P-16	A	ACT	2	6	GA	MO	O	C	FAI	RPI	2Y	STP-000-6600	
												LTJ	AppJ	STP-251-3819	
												ETC	Q	STP-000-6303	
												STC	Q	STP-000-6303	
FPW-RV40	FPW CONTAINMENT SUPPLY LINE INBOARD THERMAL RELIEF VALVE	15-01C / P-14	C	ACT	2	0.75	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
FPW-V263	REACTOR BUILDING FIRE PROTECTION HEADER INBOARD CHECK VALVE	15-01C / P-14	A/C	ACT	2	6	CK	SA	C	O/C	N/A	LTJ	AppJ	STP-251-3819	
												CVC	CM	STP-251-3819	
												CVO	CM	STP-000-6501	
FWS-MOV7A	REACTOR FEEDWATER LOOP A OUTBOARD CONTAINMENT ISOLATION VALVE	06-01B / J-14	A	ACT	2	20	GA	MO	O	C	FAI	RPI	2Y	STP-107-6801	
												LTJ	AppJ	STP-107-3806	
												ETC	CS	STP-107-6801	
												STC	CS	STP-107-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 123 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
FWS-MOV7B	REACTOR FEEDWATER LOOP B OUTBOARD CONTAINMENT ISOLATION VALVE	06-01B / N-17	A	ACT	2	20	GA	MO	O	C	FAI	RPI	2Y	STP-107-6801	CSJ-001
												LTJ	AppJ	STP-107-3807	
												ETC	CS	STP-107-6801	
												STC	CS	STP-107-6801	
FWS-V3052	REACTOR FEEDWATER INLET HEADER A CHECK VALVE	06-01B / J-14	A/C	ACT	2	20	CK	SA	O	C	N/A	LT	2Y	STP-107-6802	ROJ-007
												BDO	R	STP-000-6501	
												CVC	R	STP-107-6802	
G33-MOVF001	REACTOR WATER CLEANUP PUMPS SUCTION HEADER INBOARD CONTAINMENT ISOL VALVE	26-03A / K-10	A	ACT	1	6	GA	MO	O	C	FAI	RPI	2Y	STP-601-6801	CSJ-007
												LTJ	AppJ	STP-601-3827	
												ETC	CS	STP-601-6801	
												STC	CS	STP-601-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 124 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
G33-MOVF004	REACTOR WATER CLEANUP PUMPS SUCTION HEADER OUTBOARD CONTAINMENT ISOL VALVE	26-03A / K-12	A	ACT	1	6	GA	MO	O	C	FAI	RPI	2Y	STP-601-6801	CSJ-007
												LTJ	AppJ	STP-601-3827	
												ETC	CS	STP-601-6801	
												STC	CS	STP-601-6801	
G33-MOVF028	REACTOR WATER CLEANUP BLOWDOWN LINE CONTAINMENT INBOARD ISOLATION VALVE	26-03A / F-16	A	ACT	2	4	GA	MO	O/C	C	FAI	RPI	2Y	STP-601-6601	
												LTJ	AppJ	STP-601-3824	
												ETC	Q	STP-601-6301	
												STC	Q	STP-601-6301	
G33-MOVF034	REACTOR WATER CLEANUP BLOWDOWN LINE CONTAINMENT OUTBOARD ISOLATION VALVE	26-03A / F-15	A	ACT	2	4	GA	MO	O/C	C	FAI	RPI	2Y	STP-601-6601	
												LTJ	AppJ	STP-601-3824	
												ETC	Q	STP-601-6301	
												STC	Q	STP-601-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 125 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
G33-MOVF039	REACTOR WATER CLEANUP REGEN HTEXCHGRS OUTLET LINE OUTBOARD CONTAINMENT ISOLATION VALVE	26-03A / H-03	A	ACT	2	6	GA	MO	O	C	FAI	RPI	2Y	STP-601-6801	
												LTJ	AppJ	STP-601-3826	
												ETC	CS	STP-601-6801	CSJ-007
												STC	CS	STP-601-6801	CSJ-007
G33-MOVF040	REACTOR WATER CLEANUP REGEN HTEXCHGRS OUTLET LINE INBOARD CONTAINMENT ISOLATION VALVE	26-03A / H-04	A	ACT	2	6	GA	MO	O	C	FAI	RPI	2Y	STP-601-6801	
												LTJ	AppJ	STP-601-3826	
												ETC	CS	STP-601-6801	CSJ-007
												STC	CS	STP-601-6801	CSJ-007

Valve Summary Listing - Standard Code ISTC Valves

Page 126 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
G33-MOVF053	REACTOR WATER CLEANUP PUMPS DISCHARGE HEADER INBOARD CONTAINMENT ISOL VALVE	26-03A / J-21	A	ACT	2	4	GA	MO	O	C	FAI	RPI	2Y	STP-601-6801	CSJ-007
												LTJ	AppJ	STP-601-3828	
												ETC	CS	STP-601-6801	
												STC	CS	STP-601-6801	
G33-MOVF054	REACTOR WATER CLEANUP PUMPS DISCHARGE HEADER OUTBOARD CONTAINMENT ISOL VALVE	26-03A / L-20	A	ACT	2	4	GA	MO	O	C	FAI	RPI	2Y	STP-601-6801	CSJ-007
												LTJ	AppJ	STP-601-3828	
												ETC	CS	STP-601-6801	
												STC	CS	STP-601-6801	
G33-VF051	REACTOR WATER CLEANUP REGEN HTEXCHGRS RETURN LINE CHECK VALVE	26-03A / F-03	C	ACT	2	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-601-6801	
G33-VF052A	REACTOR WATER CLEANUP RETURN LINE {TO FEEDWATER A} CHECK VALVE	26-03A / E-02	C	ACT	2	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6801	
												CVC	CM	STP-601-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 127 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
G33-VF052B	REACTOR WATER CLEANUP RETURN LINE {TO FEEDWATER B} CHECK VALVE	26-03A / E-04	C	ACT	2	4	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6801	
												CVC	CM	STP-601-6801	
HVC-MOV1A	CONTROL ROOM AIR CONDITIONING UNITS 1A & B UPSTREAM INTAKE ISOLATION MOTOR OPERATED VALVE	22-09A / J-12	B	ACT	3	24	BF	MO	O	C	FAI	RPI	2Y	STP-402-6600	
												ETC	Q	STP-000-6303	
												STC	Q	STP-000-6303	
HVC-MOV1B	CONTROL ROOM AIR CONDITIONING UNITS 1A & B DOWNSTREAM INTAKE ISOLATION MOTOR OPERATED VALVE	22-09A / J-12	B	ACT	3	24	BF	MO	O	C	FAI	RPI	2Y	STP-402-6600	
												ETC	Q	STP-000-6303	
												STC	Q	STP-000-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 128 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVK-MOV10A	CONTROL BLDG CHILLED WTR SURGE TANK 1A NORM MAKE-UP DISCHARGE MOTOR OPERATED ISOLATION VALVE	22-14J / M-14	B	ACT	3	2	GL	MO	O/C	C	FAI	RPI	2Y	STP-410-6611	
												ETC	Q	STP-410-6311	
												STC	Q	STP-410-6311	
HVK-MOV10B	CONTROL BLDG CHILLED WTR SURGE TANK 1B NORM MAKE-UP DISCHARGE MOTOR OPERATED ISOLATION VALVE	22-14H / N-14	B	ACT	3	2	GL	MO	O/C	C	FAI	RPI	2Y	STP-410-6612	
												ETC	Q	STP-410-6312	
												STC	Q	STP-410-6312	

Valve Summary Listing - Standard Code ISTC Valves

Page 129 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVK-MOV11A	CONTROL BLDG CHILLED WTR SURGE TANK 1A ALT MAKE-UP DISCHARGE MOTOR OPERATED ISOLATION VALVE	22-14J / K-14	B	ACT	3	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-410-6801	
												ETC	CS	STP-410-6801	CSJ-013
												ETO	CS	STP-410-6801	CSJ-013
												STC	CS	STP-410-6801	CSJ-013
												STO	CS	STP-410-6801	CSJ-013

Valve Summary Listing - Standard Code ISTC Valves

Page 130 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVK-MOV11B	CONTROL BLDG CHILLED WTR SURGE TANK 1B ALT MAKE-UP DISCHARGE MOTOR OPERATED ISOLATION VALVE	22-14H / K-14	B	ACT	3	2	GL	MO	C	O/C	FAI	RPI	2Y	STP-410-6801	
												ETC	CS	STP-410-6801	CSJ-013
												ETO	CS	STP-410-6801	CSJ-013
												STC	CS	STP-410-6801	CSJ-013
												STO	CS	STP-410-6801	CSJ-013
HVK-MOV20A	CONTROL BLDG CHILLED WATER PUMP 1A DISCHARGE MOTOR OPERATED ISOLATION VALVE	22-14J / K-09	B	ACT	3	6	BF	MO	O/C	O/C	FAI	RPI	2Y	STP-410-6611	
												ETC	Q	STP-410-6311	
												ETO	Q	STP-410-6311	
												STC	Q	STP-410-6311	
												STO	Q	STP-410-6311	

Valve Summary Listing - Standard Code ISTC Valves

Page 131 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVK-MOV20B	CONTROL BLDG CHILLED WATER PUMP 1B DISCHARGE MOTOR OPERATED ISOLATION VALVE	22-14H / K-09	B	ACT	3	6	BF	MO	O/C	O/C	FAI	RPI	2Y	STP-410-6612	
												ETC	Q	STP-410-6312	
												ETO	Q	STP-410-6312	
												STC	Q	STP-410-6312	
												STO	Q	STP-410-6312	
HVK-MOV20C	CONTROL BLDG CHILLED WATER PUMP 1C DISCHARGE MOTOR OPERATED ISOLATION VALVE	22-14J / H-09	B	ACT	3	6	BF	MO	O/C	O/C	FAI	RPI	2Y	STP-410-6611	
												ETC	Q	STP-410-6311	
												ETO	Q	STP-410-6311	
												STC	Q	STP-410-6311	
												STO	Q	STP-410-6311	

Valve Summary Listing - Standard Code ISTC Valves

Page 132 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVK-MOV20D	CONTROL BLDG CHILLED WATER PUMP 1D DISCHARGE MOTOR OPERATED ISOLATION VALVE	22-14H / H-09	B	ACT	3	6	BF	MO	O/C	O/C	FAI	RPI	2Y	STP-410-6612	
												ETC	Q	STP-410-6312	
												ETO	Q	STP-410-6312	
												STC	Q	STP-410-6312	
												STO	Q	STP-410-6312	
HVK-RV45A	CONTROL BLDG CHILLED WATER SURGE TANK 1A INLET PRESSURE RELIEF VALVE	22-14J / K-17	C	ACT	3	2	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
HVK-RV45B	CONTROL BLDG CHILLED WATER SURGE TANK 1B INLET PRESSURE RELIEF VALVE	22-14H / K-17	C	ACT	3	2	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
HVK-V33	CONTROL BLDG CHILLED WATER PUMP 1A DISCHARGE CHECK VALVE	22-14J / K-10	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-410-6311	
HVK-V34	CONTROL BLDG CHILLED WATER PUMP 1C DISCHARGE CHECK VALVE	22-14J / H-09	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-410-6311	

Valve Summary Listing - Standard Code ISTC Valves

Page 133 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVK-V48	CONTROL BLDG CHILLED WTR SURGE TANK 1A ALTERNATE MAKEUP HEADER CHECK VALVE	22-14J / K-14	C	ACT	3	2	CK	SA	C	O	N/A	BDC	CM	STP-000-6617	
												CVO	CM	STP-000-6617	
HVK-V49	CNTRL BLDG CHILLED WTR SURGE TANK 1A NORMAL MAKEUP HEADER CHECK VALVE	22-14J / L-14	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-410-6503	
												CVC	CM	STP-000-6601	
HVK-V82	CONTROL BLDG CHILLED WATER PUMP 1B DISCHARGE CHECK VALVE	22-14H / K-10	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-410-6312	
HVK-V83	CONTROL BLDG CHILLED WATER PUMP 1D DISCHARGE CHECK VALVE	22-14H / H-09	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-410-6312	
HVK-V97	CONTROL BLDG CHILLED WTR SURGE TANK 1B ALTERNATE MAKEUP HEADER CHECK VALVE	22-14H / K-14	C	ACT	3	2	CK	SA	C	O	N/A	BDC	CM	STP-000-6617	
												CVO	CM	STP-000-6617	
HVK-V98	CNTRL BLDG CHILLED WTR SURGE TANK 1B NORMAL MAKEUP HEADER CHECK VALVE	22-14H / M-14	C	ACT	3	2	CK	SA	O/C	C	N/A	BDO	CM	STP-410-6504	
												CVC	CM	STP-000-6602	

Valve Summary Listing - Standard Code ISTC Valves

Page 134 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVN-MOV102	REACTOR BLDG CONTAINMENT HVR UNIT COOLER 1C OUTLET MOTOR OPERATED ISOLATION VALVE	22-14D / K-02	A	ACT	2	8	GA	MO	O	C	FAI	RPI	2Y	STP-410-6604	
												LTJ	AppJ	STP-410-3822	
												ETC	Q	STP-410-6304	
												STC	Q	STP-410-6304	
HVN-MOV127	REACTOR BLDG CONTAINMENT SUPPLY HEADER DOWNSTREAM MOTOR OPERATED ISOLATION VALVE	22-14D / J-11	A	ACT	2	8	GA	MO	O	C	FAI	RPI	2Y	STP-410-6601	
												LTJ	AppJ	STP-410-3823	
												ETC	Q	STP-410-6301	
												STC	Q	STP-410-6301	
HVN-MOV128	REACTOR BLDG CONTAINMENT RETURN HEADER UPSTREAM MOTOR OPERATED ISOLATION VALVE	22-14D / D-03	A	ACT	2	8	GA	MO	O	C	FAI	RPI	2Y	STP-410-6601	
												LTJ	AppJ	STP-410-3822	
												ETC	Q	STP-410-6301	
												STC	Q	STP-410-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 135 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVN-MOV22A	REACTOR BLDG CONTAINMENT HVR UNIT COOLER 1A OUTLET MOTOR OPERATED ISOLATION VALVE	22-14D / K-03	B	ACT	3	6	GA	MO	O	C	FAI	RPI	2Y	STP-410-6601	
												ETC	Q	STP-410-6301	
												STC	Q	STP-410-6301	
HVN-MOV22B	REACTOR BLDG CONTAINMENT HVR UNIT COOLER 1B OUTLET MOTOR OPERATED ISOLATION VALVE	22-14D / J-03	B	ACT	3	6	GA	MO	O	C	FAI	RPI	2Y	STP-410-6604	
												ETC	Q	STP-410-6304	
												STC	Q	STP-410-6304	
HVN-RV196	REACTOR BLDG CONTAINMENT UNIT COOLERS RETURN HDR PRESSURE RELIEF VALVE	22-14D / M-02	C	ACT	2	0.75	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
HVN-V1316	REACTOR BLDG CONTAINMENT UNIT COOLERS RETURN HDR BYPASS CHECK VALVE FOR HVN-MOV102	22-14D / J-02	A/C	ACT	2	0.75	CK	SA	C	O/C	N/A	LTJ	AppJ	STP-410-3822	
												CVC	CM	STP-410-3822	
												CVO	CM	STP-410-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 136 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVN-V541	REACTOR BLDG CONTAINMENT UNIT COOLERS SUPPLY HDR CHECK VALVE	22-14D / L-10	A/C	ACT	2	8	CK	SA	O	O/C	N/A	LTJ	AppJ	STP-410-3823	
												CVC	CM	STP-410-3823	
												CVO	CM	STP-410-6301	
HVN-V544	REACTOR BLDG CONTAINMENT HVR UNIT COOLER 1A INLET CHECK VALVE	22-14D / K-06	C	ACT	3	6	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-410-6301	
HVN-V545	REACTOR BLDG CONTAINMENT HVR UNIT COOLER 1B INLET CHECK VALVE	22-14D / H-08	C	ACT	3	6	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-410-6304	
HVN-V546	REACTOR BLDG CONTAINMENT HVR UNIT COOLER 1A OUTLET CHECK VALVE	22-14D / M-03	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-000-6501	
HVN-V547	REACTOR BLDG CONTAINMENT HVR UNIT COOLER 1B OUTLET CHECK VALVE	22-14D / G-03	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-000-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 137 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVR-AOV123	CONTAINMENT PURGE SUPPLY DUCT INBOARD ISOLATION AIR OPERATED VALVE	22-01B / C-11	A	ACT	2	36	BF	AO	O/C	C	C	RPI	2Y	STP-000-6600	
												LTJ		STP-403-7301	
												ETC		STP-000-6303	
												FSC		STP-000-6303	
												STC		STP-000-6303	
HVR-AOV125	DRYWELL PURGE SUPPLY DUCT OUTBOARD ISOLATION AIR OPERATED VALVE	22-01B / D-09	B	PASS	2	24	BF	AO	C	C	N/A	RPI	2Y	STP-000-6800	
HVR-AOV126	DRYWELL EXHAUST AIR DUCT OUTBOARD ISOLATION AIR OPERATED VALVE	22-01B / N-18	B	PASS	2	24	BF	AO	C	C	N/A	RPI	2Y	STP-000-6800	
HVR-AOV128	CONTAINMENT EXHAUST AIR DUCT INBOARD ISOLATION AIR OPERATED VALVE	22-01B / N-17	A	ACT	2	36	BF	AO	O/C	C	C	RPI	2Y	STP-000-6600	
												LTJ		STP-403-7301	
												ETC		STP-000-6303	
												FSC		STP-000-6303	
												STC		STP-000-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 138 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
HVR-AOV147	DRYWELL PURGE SUPPLY DUCT INBOARD ISOLATION AIR OPERATED VALVE	22-01B / D-09	B	PASS	2	24	BF	AO	C	C	N/A	RPI	2Y	STP-000-6800	
HVR-AOV148	DRYWELL EXHAUST AIR DUCT INBOARD ISOLATION AIR OPERATED VALVE	22-01B / N-19	B	PASS	2	24	BF	AO	C	C	N/A	RPI	2Y	STP-000-6800	
HVR-AOV165	CONTAINMENT PURGE SUPPLY DUCT OUTBOARD ISOLATION AIR OPERATED VALVE	22-01B / D-12	A	ACT	2	36	BF	AO	O/C	C	C	RPI	2Y	STP-000-6600	
												LTJ	AppJ	STP-403-7301	
												ETC	Q	STP-000-6303	
												FSC	Q	STP-000-6303	
												STC	Q	STP-000-6303	
HVR-AOV166	CONTAINMENT EXHAUST AIR DUCT OUTBOARD ISOLATION AIR OPERATED VALVE	22-01B / N-14	A	ACT	2	36	BF	AO	O/C	C	C	RPI	2Y	STP-000-6600	
												LTJ	AppJ	STP-403-7301	
												ETC	Q	STP-000-6303	
												FSC	Q	STP-000-6303	
												STC	Q	STP-000-6303	

Valve Summary Listing - Standard Code ISTC Valves

Page 139 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
IAS-MOV106	DRYWELL & CONTAINMENT INSTR AIR SUPPLY HEADER ISOLATION MOV	12-01C / G-04	A	ACT	2	3	GA	MO	O	C	FAI	RPI	2Y	STP-000-6800	CSJ-003 CSJ-003
												LTJ	AppJ	STP-122-3810	
												ETC	CS	STP-000-6800	
												STC	CS	STP-000-6800	
IAS-RV38A	CNTRL BLDG AIR DAMPER ACCUMULATOR TANK 5A PRESSURE RELIEF VALVE	12-01B / J-04	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
IAS-RV38B	CNTRL BLDG AIR DAMPER ACCUMULATOR TANK 5B PRESSURE RELIEF VALVE	12-01B / J-06	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
IAS-SOV36A	CNTRL BLDG AIR DAMPER ACCUMULATOR TANK 5A INSTRUMENT AIR SUPPLY ISOLATION VALVE	12-01B / H-03	B	ACT	3	2	GA	SO	O	C	C	RPI	2Y	STP-122-6601	
												ETC	Q	STP-122-6301	
												FSC	Q	STP-122-6301	
												STC	Q	STP-122-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 140 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
IAS-SOV36B	CNTRL BLDG AIR DAMPER ACCUMULATOR TANK 5B INSTRUMENT AIR SUPPLY ISOLATION VALVE	12-01B / H-05	B	ACT	3	2	GA	SO	O	C	C	RPI	2Y	STP-122-6602	
												ETC	Q	STP-122-6302	
												FSC	Q	STP-122-6302	
												STC	Q	STP-122-6302	
IAS-V3055	CNTRL BLDG BACKUP AIR BOTTLES DIV 1 BANK 1 REGULATOR INLET ISOLATION VALVE	12-01B / E-02	B	ACT	3	0.75	GL	H	O	O/C	N/A	MS	2Y	STP-122-6501	
IAS-V3056	CNTRL BLDG BACKUP AIR BOTTLES DIV 1 BANK 2 REGULATOR INLET ISOLATION VALVE	12-01B / E-04	B	ACT	3	0.75	GL	H	O	O/C	N/A	MS	2Y	STP-122-6501	
IAS-V3060	CNTRL BLDG BACKUP AIR BOTTLES DIV 2 BANK 1 REGULATOR INLET ISOLATION VALVE	12-01B / B-05	B	ACT	3	0.75	GL	H	O	O/C	N/A	MS	2Y	STP-122-6502	
IAS-V3061	CNTRL BLDG BACKUP AIR BOTTLES DIV 2 BANK 2 REGULATOR INLET ISOLATION VALVE	12-01B / B-06	B	ACT	3	0.75	GL	H	O	O/C	N/A	MS	2Y	STP-122-6502	
IAS-V3065	CNTRL BLDG BACKUP AIR BOTTLES DIV 1 BANK 1 OUTLET ISOLATION VALVE	12-01B / F-03	B	ACT	3	0.75	GL	H	O/C	O/C	N/A	MS	2Y	STP-122-6501	
IAS-V3066	CNTRL BLDG BACKUP AIR BOTTLES DIV 1 BANK 2 OUTLET ISOLATION VALVE	12-01B / F-04	B	ACT	3	0.75	GL	H	O/C	O/C	N/A	MS	2Y	STP-122-6501	
IAS-V3069	CNTRL BLDG BACKUP AIR BOTTLES DIV 2 BANK 1 OUTLET ISOLATION VALVE	12-01B / C-05	B	ACT	3	0.75	GL	H	O/C	O/C	N/A	MS	2Y	STP-122-6502	

Valve Summary Listing - Standard Code ISTC Valves

Page 141 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
IAS-V3070	CNTRL BLDG BACKUP AIR BOTTLES DIV 2 BANK 2 OUTLET ISOLATION VALVE	12-01B / C-06	B	ACT	3	0.75	GL	H	O/C	O/C	N/A	MS	2Y	STP-122-6502	
IAS-V3095	CNTRL BLDG BACKUP AIR BOTTLES DIV 1 BANK 1 OUTLET CHECK VALVE	12-01B / F-02	C	ACT	3	0.75	CK	SA	C	O	N/A	BDC	CM	STP-122-6501	
												CVO	CM	STP-122-6501	
IAS-V3096	CNTRL BLDG BACKUP AIR BOTTLES DIV 1 BANK 2 OUTLET CHECK VALVE	12-01B / F-04	C	ACT	3	0.75	CK	SA	C	O	N/A	BDC	CM	STP-122-6501	
												CVO	CM	STP-122-6501	
IAS-V3097	CNTRL BLDG BACKUP AIR BOTTLES DIV 2 BANK 1 OUTLET CHECK VALVE	12-01B / C-05	C	ACT	3	0.75	CK	SA	C	O	N/A	BDC	CM	STP-122-6502	
												CVO	CM	STP-122-6502	
IAS-V3098	CNTRL BLDG BACKUP AIR BOTTLES DIV 2 BANK 2 OUTLET CHECK VALVE	12-01B / C-06	C	ACT	3	0.75	CK	SA	C	O	N/A	BDC	CM	STP-122-6502	
												CVO	CM	STP-122-6502	
IAS-V514	CNTRL BLDG AIR DAMPER SUPPLY HEADER B CHECK VALVE	12-01B / J-05	C	ACT	3	2	CK	SA	O	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-122-6502	
IAS-V515	CNTRL BLDG AIR DAMPER SUPPLY HEADER A CHECK VALVE	12-01B / J-03	C	ACT	3	2	CK	SA	O	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-122-6501	
IAS-V78	DRYWELL INSTRUMENT AIR SUPPLY HEADER CHECK VALVE	12-01C / H-08	C	ACT	2	3	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-000-6617	

Valve Summary Listing - Standard Code ISTC Valves

Page 142 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
IAS-V80	DRYWELL & CONTAINMENT INSTR AIR SUPPLY HEADER CHECK VALVE	12-01C / G-04	A/C	ACT	2	3	CK	SA	O/C	C	N/A	LTJ	AppJ	STP-122-3810	
												BDO	CM	STP-000-6501	
												CVC	CM	STP-122-3810	
ICS-V21	REACTOR CORE ISOL COOLING MINIMUM FLOW LINE CHECK VALVE	27-06A / M-11	C	ACT	2	2	CK	SA	C	O	N/A	BDC	CM	STP-000-6502	
												CVO	CM	STP-209-6310	
ICS-V3004	RCIC DISCHARGE HEADER CHECK VALVE	27-06A / N-12	C	ACT	2	6	CK	SA	C	O/C	N/A	CVC	CM	STP-209-6800	
												CVO	CM	STP-209-6800	
JRB-V1K	REACTOR DOOR SEAL 3- WAY BALL VALVE	0219-711-056-048 / C-04	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-6300	
JRB-V1L	REACTOR DOOR SEAL 3- WAY BALL VALVE	0219-711-056-048 / C-05	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-6300	
JRB-V1M	OUTER DOOR SEAL 3- WAY BALL VALVE	0219-711-056-048 / K-05	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-6300	
JRB-V1N	OUTER DOOR SEAL 3- WAY BALL VALVE	0219-711-056-048 / K-07	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-6300	
JRB-V2K	REACTOR DOOR SEAL 3- WAY BALL VALVE	0219-711-056-048 / C-04	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-6300	
JRB-V2L	REACTOR DOOR SEAL 3- WAY BALL VALVE	0219-711-056-048 / C-05	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-6300	
JRB-V2M	OUTER DOOR SEAL 3- WAY BALL VALVE	0219-711-056-048 / K-05	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-6300	
JRB-V2N	OUTER DOOR SEAL 3- WAY BALL VALVE	0219-711-056-048 / K-07	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-6300	
JRB-V3H	REACTOR DOOR SEAL 3- WAY BALL VALVE	0219-713-056-057 / N/A	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-7204	
JRB-V3J	REACTOR DOOR SEAL 3- WAY BALL VALVE	0219-713-056-057 / N/A	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-7204	
JRB-V3K	OUTER DOOR SEAL 3- WAY BALL VALVE	0219-713-056-057 / N/A	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-7204	

Valve Summary Listing - Standard Code ISTC Valves

Page 143 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
JRB-V3L	OUTER DOOR SEAL 3-WAY BALL VALVE	0219-713-056-057 / N/A	B	ACT	2	0.5	BA	H	O/C	O	N/A	MS	2Y	STP-057-7204	
LMS-V12	LEAKAGE MONITORING SYS MANOMETER FROM CONTAINMENT INLET OUTBOARD CONTAINMENT ISOLATION VALVE	33-02C / N-12	A	PASS	2	0.75	GA	H	LC	C	N/A	LTJ	AppJ	STP-552-3823	
LMS-V14	LEAKAGE MONITORING SYS MANOMETER FROM CONTAINMENT INLET INBOARD CONTAINMENT ISOLATION VALVE	33-02C / L-15	A	PASS	2	0.75	GA	H	LC	C	N/A	LTJ	AppJ	STP-552-3823	
LMS-V16	LEAKAGE MONITORING SYS MANOMETER FROM DRYWELL INLET OUTBOARD CONTAINMENT ISOLATION VALVE	33-02C / J-13	A	PASS	2	0.75	GA	H	LC	C	N/A	LTJ	AppJ	STP-552-3824	
LMS-V7	LEAKAGE MONITORING SYS MANOMETER FROM DRYWELL INLET INBOARD CONTAINMENT ISOLATION VALVE	33-02C / J-15	A	PASS	2	0.75	GA	H	LC	C	N/A	LTJ	AppJ	STP-552-3824	
LSV-RV8A	PENETRATION VALVE LEAKAGE CONTROL AIR ACCUMULATR A PRESSURE RELIEF VALVE	27-20B / E-14	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
LSV-RV8B	PENETRATION VALVE LEAKAGE CONTROL AIR ACCUMULATR B PRESSURE RELIEF VALVE	27-20B / P-14	C	ACT	2	1	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
LSV-V112	PENETRATION VALVE LEAKAGE CONTROL AIR ACCUMULATR A INSTRUMENT AIR CHARGING LINE CHECK VALVE	27-20B / E-18	C	ACT	2	0.75	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-255-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 144 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
LSV-V118	PENETRATION VALVE LEAKAGE CONTROL AIR ACCUMULATR B INSTRUMENT AIR CHARGING LINE CHECK VALVE	27-20B / P-18	C	ACT	2	0.75	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-255-6302	
RHS-AOV62	SUPPRESSION POOL CLEANUP & COOLING SYSTEM SUCTION VALVE	27-07C / K-14	B	ACT	2	10	BF	AO	O	C	C	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												FSC	Q	STP-204-6304	
												STC	Q	STP-204-6304	
RHS-AOV63	SUPPRESSION POOL CLEANUP & COOLING SYSTEM SUCTION VALVE	27-07C / K-16	B	ACT	2	10	BF	AO	O	C	C	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												FSC	Q	STP-204-6304	
												STC	Q	STP-204-6304	
RHS-AOV64	SUPPRESSION POOL CLEANUP & COOLING SYSTEM DISCHARGE VALVE	27-07C / G-04	B	ACT	2	10	BF	AO	O	C	C	RPI	2Y	STP-204-6602	
												ETC	Q	STP-204-6304	
												FSC	Q	STP-204-6304	
												STC	Q	STP-204-6304	

Valve Summary Listing - Standard Code ISTC Valves

Page 145 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
RHS-RV65	SUPPRESSION POOL CLEANUP & COOLING SYSTEM SUCTION LINE FROM RHR SYSTEM THERMAL RELIEF VALVE	27-07C / L-15	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
RHS-RV66	SUPPRESSION POOL CLEANUP & COOLING SYSTEM DISCHARGE TO RHR SYSTEM THERMAL RELIEF VALVE	27-07C / G-05	C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
RHS-RV67A	RESIDUAL HEAT REMOVAL PUMP A DISCHARGE HEADER PRESSURE RELIEF VALVE	27-07A / K-13	C	ACT	2	1.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
RHS-RV67B	RESIDUAL HEAT REMOVAL PUMP B DISCHARGE HEADER THERMAL RELIEF VALVE	27-07B / H-15	C	ACT	2	1.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
RHS-V240	RESIDUAL HEAT REMOVAL PUMP C SHUTDOWN COOLING INLET CHECK VALVE	27-07A / E-20	A/C	ACT	1	1	CK	SA	C	O/C	N/A	LT	2Y	STP-204-6603	
												LTJ	AppJ	STP-204-3816	
												CVC	R	STP-204-6603	ROJ-008
												CVO	R	STP-204-6604	ROJ-008

Valve Summary Listing - Standard Code ISTC Valves

Page 146 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SAS-MOV102	REACTOR BUILDING SERVICE AIR SUPPLY HEADER OUTBOARD CONTAINMENT ISOLATION VALVE	12-02C / B-16	A	ACT	2	4	GA	MO	O	C	FAI	RPI	2Y	STP-000-6600	
												LTJ	AppJ	STP-121-3809	
												ETC	Q	STP-000-6303	
												STC	Q	STP-000-6303	
SAS-V486	REACTOR BUILDING SERVICE AIR SUPPLY HEADER CHECK VALVE	12-02C / C-15	A/C	ACT	2	4	CK	SA	O/C	C	N/A	LTJ	AppJ	STP-121-3809	
												BDO	CM	STP-000-6501	
												CVC	CM	STP-121-3809	
SFC-MOV119	FUEL POOL COOLERS COMMON HEADER OUTLET TO REFUELING CAVITY ISOL VALVE	34-02A / J-11	A	ACT	2	12	GA	MO	O	C	FAI	RPI	2Y	STP-602-6601	
												LTJ	AppJ	STP-602-3825	
												ETC	Q	STP-602-6301	
												STC	Q	STP-602-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 147 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SFC-MOV120	CONTAINMENT POOLS TO PURIFICATION SYSTEM HEADER INBOARD CONTAINMENT ISOLATION VALVE	34-02A / L-09	A	ACT	2	12	GA	MO	C	C	FAI	RPI	2Y	STP-602-6601	
												LTJ	AppJ	STP-602-3826	
												ETC	Q	STP-602-6301	
												STC	Q	STP-602-6301	
SFC-MOV121	CONTAINMENT POOLS TO PURIFICATION SYSTEM HEADER OUTBOARD CONTAINMENT ISOLATION VALVE	34-02A / N-10	A	ACT	2	8	GA	MO	O	C	FAI	RPI	2Y	STP-602-6601	
												LTJ	AppJ	STP-602-3827	
												ETC	Q	STP-602-6301	
												STC	Q	STP-602-6301	
SFC-MOV122	CONTAINMENT POOLS TO PURIFICATION SYSTEM HEADER OUTBOARD CONTAINMENT ISOLATION VALVE	34-02A / M-11	A	ACT	2	12	GA	MO	C	C	FAI	RPI	2Y	STP-602-6601	
												LTJ	AppJ	STP-602-3826	
												ETC	Q	STP-602-6301	
												STC	Q	STP-602-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 148 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SFC-MOV139	CONTAINMENT POOLS TO PURIFICATION SYSTEM HEADER INBOARD CONTAINMENT ISOLATION VALVE	34-02A / N-09	A	ACT	2	8	GA	MO	O	C	FAI	RPI	2Y	STP-602-6601	
												LTJ	AppJ	STP-602-3827	
												ETC	Q	STP-602-6301	
												STC	Q	STP-602-6301	
SFC-V101	FUEL POOL COOLERS COMMON HEADER OUTLET TO REFUELING CAVITY CHECK VALVE	34-02A / J-09	A/C	ACT	2	12	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-602-3825	
												CVC	CM	STP-602-3825	
												CVO	CM	STP-000-6501	
SFC-V35	FUEL POOL COOLING PUMP B SUCTION HEADER CROSS TIE ISOLATION VALVE	34-02A / D-19	B	ACT	3	12	GA	H	O/C	O	N/A	MS	2Y	STP-602-6302	
SFC-V350	CONTAINMENT POOLS TO PURIFICATION SYSTEM HEADER INBOARD CONTAINMENT ISOL VALVE BYPASS CHECK VALVE	34-02A / L-09	A/C	ACT	2	0.75	CK	SA	C	O/C	N/A	LTJ	AppJ	STP-602-3826	
												CVC	CM	STP-602-3826	
												CVO	CM	STP-602-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 149 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SFC-V351	CONTAINMENT POOLS TO PURIFICATION SYSTEM HEADER INBOARD CONTAINMENT ISOL VALVE BYPASS CHECK VALVE	34-02A / N-09	A/C	ACT	2	0.75	CK	SA	C	O/C	N/A	LTJ	AppJ	STP-602-3827	
												CVC	CM	STP-602-3827	
												CVO	CM	STP-602-6501	
SFC-V37	FUEL POOL COOLING PUMPS SUCTION FROM CONTAINMENT POOL ISOLATION VALVE	34-02A / D-19	B	ACT	3	12	GA	H	O/C	C	N/A	MS	2Y	STP-602-6302	
SFC-V39	FUEL POOL COOLING PUMP A SUCTION HEADER CHECK VALVE	34-02A / H-18	C	ACT	3	12	CK	SA	O/C	O/C	N/A	CVC	CM	STP-602-6501	
												CVO	CM	STP-602-6311	
SFC-V40	FUEL POOL COOLING PUMP B SUCTION HEADER CHECK VALVE	34-02A / E-19	C	ACT	3	12	CK	SA	O/C	O/C	N/A	CVC	CM	STP-602-6502	
												CVO	CM	STP-602-6312	
SFC-V51	FUEL POOL COOLER B OUTLET HEADER CROSS TIE ISOLATION VALVE	34-02A / E-09	B	ACT	3	10	GA	H	O/C	C	N/A	MS	2Y	STP-602-6302	
SFC-V55	FUEL POOL COOLER B OUTLET TO FUEL STORAGE POOL ISOLATION VALVE	34-02A / D-09	B	ACT	3	10	GA	H	O/C	O	N/A	MS	2Y	STP-602-6302	
SFC-V59	FUEL POOL COOLING PUMP B DISCHARGE HEADER CHECK VALVE	34-02A / D-13	C	ACT	3	10	CK	SA	O/C	O	N/A	BDC	CM	STP-602-6502	
												CVO	CM	STP-602-6312	

Valve Summary Listing - Standard Code ISTC Valves

Page 150 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SFC-V60	FUEL POOL COOLER B OUTLET CHECK VALVE	34-02A / D-10	C	ACT	3	10	CK	SA	O/C	O	N/A	BDC CVO	CM CM	STP-602-6502 STP-602-6312	
SFC-V61	FUEL POOL COOLING PUMP A DISCHARGE HEADER CHECK VALVE	34-02A / G-13	C	ACT	3	10	CK	SA	O/C	O	N/A	BDC CVO	CM CM	STP-602-6501 STP-602-6311	
SFC-V62	FUEL POOL COOLER A OUTLET CHECK VALVE	34-02A / G-09	C	ACT	3	10	CK	SA	O/C	O	N/A	BDC CVO	CM CM	STP-602-6501 STP-602-6311	
SSR-SOV130	REACTOR SAMPLING SYSTEM SAMPLE STATION REACTOR COOLANT SAMPLE ISOLATION VALVE	21-02B / L-19	A	ACT	2	0.5	GL	SO	C	C	C	RPI LTJ ETC FSC STC	2Y AppJ Q Q Q	STP-610-6601 STP-610-3827 STP-610-6301 STP-610-6301 STP-610-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 151 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SSR-SOV131	REACTOR SAMPLING SYSTEM SAMPLE STATION REACTOR COOLANT SAMPLE ISOLATION VALVE	21-02B / L-17	A	ACT	2	0.5	GL	SO	C	C	C	RPI	2Y	STP-610-6601	
												LTJ	AppJ	STP-610-3827	
												ETC	Q	STP-610-6301	
												FSC	Q	STP-610-6301	
												STC	Q	STP-610-6301	
SSR-SOV133	REACTOR SAMPLING SYSTEM SAMPLE STATION CNTMNT ATMOSPHERE & LEAK MONIT SMPL LINE ISOL VALVE	21-02B / N-18	A	ACT	2	0.75	GL	SO	C	C	C	RPI	2Y	STP-610-6601	VPS-003
												LTJ	AppJ	STP-610-3828	
												ETC	Q	STP-610-6301	
												FSC	Q	STP-610-6301	
												STC	Q	STP-610-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 152 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SSR-SOV134	REACTOR SAMPLING SYSTEM SAMPLE STATION CNTMNT ATMOSPHERE & LEAK MONIT SMPL LINE ISOL VALVE	21-02B / N-17	A	ACT	2	0.75	GL	SO	C	C	C	RPI	2Y	STP-610-6601	VPS-003
												LTJ	AppJ	STP-610-3828	
												ETC	Q	STP-610-6301	
												FSC	Q	STP-610-6301	
												STC	Q	STP-610-6301	
SSR-SOV139	REACTOR SAMPLING SYSTEM SAMPLE STATION SUPPRESSION POOL RETURN LINE ISOLATION VALVE	21-02B / G-16	B	ACT	2	1	GL	SO	C	C	C	RPI	2Y	STP-610-6601	
												ETC	Q	STP-610-6301	
												FSC	Q	STP-610-6301	
												STC	Q	STP-610-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 153 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SSR-SOV140	REACTOR SAMPLING SYSTEM SAMPLE STATION CONTAINMENT ATMOSPHERE & LEAK MONIT SMPL LINE ISOL VLV	21-02B / F-16	A	ACT	2	1	GL	SO	C	C	C	RPI	2Y	STP-610-6601	VPS-003
												LTJ	AppJ	STP-610-3829	
												ETC	Q	STP-610-6301	
												FSC	Q	STP-610-6301	
												STC	Q	STP-610-6301	
SSR-V706	REACTOR PLANT SAMPLING SYSTEM SAMPLE STATION CNTMNT ATMOSPHERE & LEAK MONIT SMPL LINE CHECK VLV	21-02B / F-17	A/C	ACT	2	0.75	CK	SA	O/C	C	N/A	LTJ	AppJ	STP-610-3829	
												BDO	CM	STP-000-6501	
												CVC	CM	STP-610-3829	

Valve Summary Listing - Standard Code ISTC Valves

Page 154 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SVV-MOV1A	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR AIR SUPPLY LINE FROM DRYER SKID A ISOLATION VALVE	03-01B / M-17	A	ACT	2	1.5	GL	MO	O	O/C	FAI	RPI	2Y	STP-208-6607	
												LTJ	AppJ	STP-202-3811	
												ETC	Q	STP-208-6301	
												ETO	Q	STP-208-6301	
												STC	Q	STP-208-6301	
												STO	Q	STP-208-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 155 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SVV-MOV1B	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR AIR SUPPLY LINE FROM DRYER SKID B ISOLATION VALVE	03-01B / M-07	A	ACT	2	1.5	GL	MO	O	O/C	FAI	RPI	2Y	STP-208-6608	
												LTJ	AppJ	STP-202-3812	
												ETC	Q	STP-208-6302	
												ETO	Q	STP-208-6302	
												STC	Q	STP-208-6302	
												STO	Q	STP-208-6302	
SVV-V121	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR SPLV FROM MSIV POSITIVE LEAK CONTROL SYS CHECK VALVE	03-01B / N-20	C	ACT	2	1.5	CK	SA	C	O	N/A	BDC	CM	STP-000-6502	
												CVO	CM	STP-000-6801	

Valve Summary Listing - Standard Code ISTC Valves

Page 156 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SVV-V122	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR SUPPLY LINE FROM DRYER SKID A CHECK VALVE	03-01B / L-13	C	ACT	2	1.5	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-000-6601	
SVV-V123	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR SUPPLY LINE FROM DRYER SKID A CHECK VALVE	03-01B / L-13	C	ACT	2	1.5	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-000-6601	
SVV-V128	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR SPLY FROM MSIV POSITIVE LEAK CONTROL SYS CHECK VALVE	03-01B / N-10	C	ACT	2	1.5	CK	SA	C	O	N/A	BDC	CM	STP-000-6502	
												CVO	CM	STP-000-6801	
SVV-V129	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR SUPPLY LINE FROM DRYER SKID B CHECK VALVE	03-01B / L-11	C	ACT	2	1.5	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-000-6602	

Valve Summary Listing - Standard Code ISTC Valves

Page 157 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SVV-V130	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR SUPPLY LINE FROM DRYER SKID B CHECK VALVE	03-01B / L-11	C	ACT	2	1.5	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-000-6602	
SVV-V31	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR SUPPLY LINE TO ACCUMULATOR CHECK VALVE	03-01B / M-16	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-202-3811	
												CVC	CM	STP-202-3811	
												CVO	CM	STP-000-6501	
SVV-V9	MAIN STEAM LINE PRESSURE RELIEF VALVE OPERATOR SUPPLY LINE TO ACCUMULATOR CHECK VALVE	03-01B / M-06	A/C	ACT	2	1.5	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-202-3812	
												CVC	CM	STP-202-3812	
												CVO	CM	STP-000-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 158 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-AOV51A	LSV COMPRESSOR SKID A AFTERCOOLER SERVICE WATER RETURN HEADER ISOLATION VALVE	09-10C / K-18	B	ACT	3	2	GL	AO	C	O	O	RPI	2Y	STP-256-6603	
												ETO	Q	STP-256-6301	
												FSO	Q	STP-256-6301	
												STO	Q	STP-256-6301	
SWP-AOV51B	LSV COMPRESSOR SKID B AFTERCOOLER SERVICE WATER RETURN HEADER ISOLATION VALVE	09-10F / E-21	B	ACT	3	2	GL	AO	C	O	O	RPI	2Y	STP-256-6604	
												ETO	Q	STP-256-6302	
												FSO	Q	STP-256-6302	
												STO	Q	STP-256-6302	
SWP-MOV171	AUXILIARY BUILDING UNIT COOLERS LOOP B SERVICE WATER RETURN HEADER ISOLATION VALVE	09-10F / G-06	B	PASS	3	8	BF	MO	O	O	FAI	RPI	2Y	STP-256-6609	
SWP-MOV172	AUXILIARY BUILDING UNIT COOLERS LOOP B SERVICE WATER SUPPLY HEADER ISOLATION VALVE	09-10F / G-07	B	PASS	3	8	BF	MO	O	O	FAI	RPI	2Y	STP-256-6609	
SWP-MOV173	AUXILIARY BUILDING UNIT COOLERS LOOP B SERVICE WATER RETURN HEADER ISOLATION VALVE	09-10F / G-02	B	PASS	3	8	BF	MO	O	O	FAI	RPI	2Y	STP-256-6610	

Valve Summary Listing - Standard Code ISTC Valves

Page 159 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV174	AUXILIARY BUILDING UNIT COOLERS LOOP B SERVICE WATER SUPPLY HEADER ISOLATION VALVE	09-10F / G-04	B	PASS	3	8	BF	MO	O	O	FAI	RPI	2Y	STP-256-6610	
SWP-MOV27A	CNTRL BLDG CHILLED WTR CHILLER CONDENSER A SERVICE WATER SUPPLY LINE ISOLATION VALVE	09-10B / M-19	B	ACT	3	6	BF	MO	O/C	O/C	FAI	RPI	2Y	STP-256-6621	
												ETC	Q	STP-256-6321	
												ETO	Q	STP-256-6321	
												STC	Q	STP-256-6321	
												STO	Q	STP-256-6321	
SWP-MOV27B	CNTRL BLDG CHILLED WTR CHILLER CONDENSER B SERVICE WATER SUPPLY LINE ISOLATION VALVE	09-10B / J-20	B	ACT	3	6	BF	MO	O/C	O/C	FAI	RPI	2Y	STP-256-6622	
												ETC	Q	STP-256-6322	
												ETO	Q	STP-256-6322	
												STC	Q	STP-256-6322	
												STO	Q	STP-256-6322	

Valve Summary Listing - Standard Code ISTC Valves

Page 160 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV27C	CNTRL BLDG CHILLED WTR CHILLER CONDENSER C SERVICE WATER SUPPLY LINE ISOLATION VALVE	09-10B / L-19	B	ACT	3	6	BF	MO	O/C	O/C	FAI	RPI	2Y	STP-256-6621	
												ETC	Q	STP-256-6321	
												ETO	Q	STP-256-6321	
												STC	Q	STP-256-6321	
												STO	Q	STP-256-6321	
SWP-MOV27D	CNTRL BLDG CHILLED WTR CHILLER CONDENSER D SERVICE WATER SUPPLY LINE ISOLATION VALVE	09-10B / H-20	B	ACT	3	6	BF	MO	O/C	O/C	FAI	RPI	2Y	STP-256-6622	
												ETC	Q	STP-256-6322	
												ETO	Q	STP-256-6322	
												STC	Q	STP-256-6322	
												STO	Q	STP-256-6322	

Valve Summary Listing - Standard Code ISTC Valves

Page 161 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV40A	STANDBY SERVICE WATER PUMP A DISCHARGE ISOLATION VALVE	09-10E / G-10	B	ACT	3	18	BF	MO	C	O	FAI	RPI	2Y	STP-256-6605	
												ETO	Q	STP-256-6303	
												STO	Q	STP-256-6303	
SWP-MOV40B	STANDBY SERVICE WATER PUMP B DISCHARGE ISOLATION VALVE	09-10E / G-07	B	ACT	3	18	BF	MO	C	O	FAI	RPI	2Y	STP-256-6606	
												ETO	Q	STP-256-6304	
												STO	Q	STP-256-6304	
SWP-MOV40C	STANDBY SERVICE WATER PUMP C DISCHARGE ISOLATION VALVE	09-10E / G-09	B	ACT	3	18	BF	MO	C	O	FAI	RPI	2Y	STP-256-6605	
												ETO	Q	STP-256-6303	
												STO	Q	STP-256-6303	
SWP-MOV40D	STANDBY SERVICE WATER PUMP D DISCHARGE ISOLATION VALVE	09-10E / G-08	B	ACT	3	18	BF	MO	C	O	FAI	RPI	2Y	STP-256-6606	
												ETO	Q	STP-256-6304	
												STO	Q	STP-256-6304	

Valve Summary Listing - Standard Code ISTC Valves

Page 162 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV4A	DRYWELL UNIT COOLERS SUPPLY HEADER A INBOARD CONTAINMENT ISOLATION VALVE	09-10D / B-17	B	ACT	2	10	GA	MO	O	C	FAI	RPI	2Y	STP-256-6603	
												ETC	Q	STP-256-6301	
												STC	Q	STP-256-6301	
SWP-MOV4B	DRYWELL UNIT COOLERS SUPPLY HEADER B INBOARD CONTAINMENT ISOLATION VALVE	09-10D / D-17	B	ACT	2	10	GA	MO	O	C	FAI	RPI	2Y	STP-256-6604	
												ETC	Q	STP-256-6302	
												STC	Q	STP-256-6302	
SWP-MOV501A	REACTOR CLOSED COOLING WTR HTEXCHGRS SERVICE WTR SUPPLY HEADER ISOLATION VALVE	09-10D / N-02	B	ACT	3	18	BF	MO	O/C	C	FAI	RPI	2Y	STP-256-6603	
												ETC	Q	STP-256-6301	
												STC	Q	STP-256-6301	
SWP-MOV501B	REACTOR CLOSED COOLING WTR HTEXCHGRS SERVICE WTR SUPPLY HEADER ISOLATION VALVE	09-10D / N-03	B	ACT	3	18	BF	MO	O/C	C	FAI	RPI	2Y	STP-256-6604	
												ETC	Q	STP-256-6302	
												STC	Q	STP-256-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 163 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV502A	CONTAINMENT UNIT COOLER A SUPPLY HEADER INBOARD CONTAINMENT ISOLATION VALVE	09-10D / B-18	B	ACT	3	6	GA	MO	C	O/C	FAI	RPI	2Y	STP-256-6803	
												ETC	CS	STP-256-6803	CSJ-011
												ETO	CS	STP-256-6803	CSJ-011
												STC	CS	STP-256-6803	CSJ-011
												STO	CS	STP-256-6803	CSJ-011
SWP-MOV502B	CONTAINMENT UNIT COOLER B SUPPLY HEADER INBOARD CONTAINMENT ISOLATION VALVE	09-10D / E-18	B	ACT	3	6	GA	MO	C	O/C	FAI	RPI	2Y	STP-256-6804	
												ETC	CS	STP-256-6804	CSJ-011
												ETO	CS	STP-256-6804	CSJ-011
												STC	CS	STP-256-6804	CSJ-011
												STO	CS	STP-256-6804	CSJ-011

Valve Summary Listing - Standard Code ISTC Valves

Page 164 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV503A	CONTAINMENT UNIT COOLER A RETURN HEADER INBOARD CONTAINMENT ISOLATION VALVE	09-10D / L-18	A	ACT	2	6	GA	MO	C	O/C	FAI	RPI	2Y	STP-256-6803	
												LTJ	AppJ	STP-256-3828	
												ETC	CS	STP-256-6803	CSJ-011
												ETO	CS	STP-256-6803	CSJ-011
												STC	CS	STP-256-6803	CSJ-011
												STO	CS	STP-256-6803	CSJ-011
SWP-MOV503B	CONTAINMENT UNIT COOLER B RETURN HEADER INBOARD CONTAINMENT ISOLATION VALVE	09-10D / H-18	A	ACT	2	6	GA	MO	C	O/C	FAI	RPI	2Y	STP-256-6804	
												LTJ	AppJ	STP-256-3829	
												ETC	CS	STP-256-6804	CSJ-011
												ETO	CS	STP-256-6804	CSJ-011
												STC	CS	STP-256-6804	CSJ-011
												STO	CS	STP-256-6804	CSJ-011

Valve Summary Listing - Standard Code ISTC Valves

Page 165 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV504A	FUEL POOL COOLER A SERVICE WATER RETURN LINE ISOLATION VALVE	09-10D / N-19	B	ACT	3	12	GA	MO	C	O	FAI	RPI	2Y	STP-256-6803	
												ETO	CS	STP-256-6803	CSJ-011
												STO	CS	STP-256-6803	CSJ-011
SWP-MOV504B	FUEL POOL COOLER B SERVICE WATER RETURN LINE ISOLATION VALVE	09-10D / J-20	B	ACT	3	12	GA	MO	C	O	FAI	RPI	2Y	STP-256-6804	
												ETO	CS	STP-256-6804	CSJ-011
												STO	CS	STP-256-6804	CSJ-011
SWP-MOV505A	STANDBY SERVICE WTR PUMPS DIV 1 DISCH HDR CROSS TIE LINE ISOLATION VALVE {TO DIVISION 2}	09-10E / K-09	B	PASS	3	30	BF	MO	C	C	FAI	RPI	2Y	STP-256-6609	
SWP-MOV505B	STANDBY SERVICE WTR PUMPS DIV 2 DISCH HDR CROSS TIE LINE ISOLATION VALVE {TO DIVISION 1}	09-10E / K-07	B	PASS	3	30	BF	MO	C	C	FAI	RPI	2Y	STP-256-6610	

Valve Summary Listing - Standard Code ISTC Valves

Page 166 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV506A	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER RETURN HEADER ISOLATION VALVE	09-10B / N-05	B	ACT	3	8	BF	MO	O	O/C	FAI	RPI	2Y	STP-256-6611	
												ETC	Q	STP-256-6311	
												ETO	Q	STP-256-6311	
												STC	Q	STP-256-6311	
												STO	Q	STP-256-6311	

Valve Summary Listing - Standard Code ISTC Valves

Page 167 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV506B	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER RETURN HEADER ISOLATION VALVE	09-10B / N-02	B	ACT	3	8	BF	MO	O	O/C	FAI	RPI	2Y	STP-256-6611	
												ETC	Q	STP-256-6311	
												ETO	Q	STP-256-6311	
												STC	Q	STP-256-6311	
												STO	Q	STP-256-6311	
SWP-MOV507A	DRYWELL UNIT COOLERS SUPPLY HEADER A OUTBOARD CONTAINMENT ISOLATION VALVE	09-10D / B-20	A	ACT	2	12	GA	MO	O	O/C	FAI	RPI	2Y	STP-256-6603	
												LTJ	AppJ	STP-256-3820	
												ETC	Q	STP-256-6301	
												ETO	Q	STP-256-6301	
												STC	Q	STP-256-6301	
												STO	Q	STP-256-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 168 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV507B	DRYWELL UNIT COOLERS SUPPLY HEADER B OUTBOARD CONTAINMENT ISOLATION VALVE	09-10D / D-19	A	ACT	2	12	GA	MO	O	O/C	FAI	RPI	2Y	STP-256-6604	
												LTJ	AppJ	STP-256-3821	
												ETC	Q	STP-256-6302	
												ETO	Q	STP-256-6302	
												STC	Q	STP-256-6302	
												STO	Q	STP-256-6302	
SWP-MOV510A	FUEL POOL COOLER A SERVICE WATER SUPPLY LINE ISOLATION VALVE	09-10D / C-21	B	ACT	3	12	GA	MO	C	O	FAI	RPI	2Y	STP-256-6803	CSJ-011
												ETO	CS	STP-256-6803	
												STO	CS	STP-256-6803	
SWP-MOV510B	FUEL POOL COOLER B SERVICE WATER SUPPLY LINE ISOLATION VALVE	09-10D / E-20	B	ACT	3	12	GA	MO	C	O	FAI	RPI	2Y	STP-256-6804	CSJ-011
												ETO	CS	STP-256-6804	
												STO	CS	STP-256-6804	

Valve Summary Listing - Standard Code ISTC Valves

Page 169 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV511A	REACTOR CLOSED COOLING WTR HTEXCHGRS SERVICE WTR RETURN HEADER ISOLATION VALVE	09-10D / G-02	B	ACT	3	18	BF	MO	O/C	C	FAI	RPI	2Y	STP-256-6603	
												ETC	Q	STP-256-6301	
												STC	Q	STP-256-6301	
SWP-MOV511B	REACTOR CLOSED COOLING WTR HTEXCHGRS SERVICE WTR RETURN HEADER ISOLATION VALVE	09-10D / G-03	B	ACT	3	18	BF	MO	O/C	C	FAI	RPI	2Y	STP-256-6604	
												ETC	Q	STP-256-6302	
												STC	Q	STP-256-6302	
SWP-MOV55A	STANDBY COOLING TOWER 1 DIVISION 1 RETURN LINE ISOLATION VALVE	09-10E / H-16	B	ACT	3	30	BF	MO	C	O	FAI	RPI	2Y	STP-256-6603	
												ETO	Q	STP-256-6301	
												STO	Q	STP-256-6301	
SWP-MOV55B	STANDBY COOLING TOWER 1 DIVISION 2 RETURN LINE ISOLATION VALVE	09-10E / G-17	B	ACT	3	30	BF	MO	C	O	FAI	RPI	2Y	STP-256-6604	
												ETO	Q	STP-256-6302	
												STO	Q	STP-256-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 170 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV57A	SERVICE WATER NORMAL SUPPLY HEADER A INLET ISOLATION VALVE	09-10B / A-15	B	ACT	3	30	BF	MO	O	C	FAI	RPI	2Y	STP-256-6801	
												ETC	CS	STP-256-6801	CSJ-009
												STC	CS	STP-256-6801	CSJ-009
SWP-MOV57B	SERVICE WATER NORMAL SUPPLY HEADER B INLET ISOLATION VALVE	09-10B / C-15	B	ACT	3	30	BF	MO	O	C	FAI	RPI	2Y	STP-256-6802	
												ETC	CS	STP-256-6802	CSJ-009
												STC	CS	STP-256-6802	CSJ-009
SWP-MOV5A	DRYWELL UNIT COOLERS RETURN HEADER A INBOARD CONTAINMENT ISOLATION VALVE	09-10D / L-18	A	ACT	3	10	GA	MO	O	C	FAI	RPI	2Y	STP-256-6603	
												LTJ	AppJ	STP-256-3828	
												ETC	Q	STP-256-6301	
												STC	Q	STP-256-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 171 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV5B	DRYWELL UNIT COOLERS RETURN HEADER B INBOARD CONTAINMENT ISOLATION VALVE	09-10D / H-18	A	ACT	3	10	GA	MO	O	C	FAI	RPI	2Y	STP-256-6604	
												LTJ	AppJ	STP-256-3829	
												ETC	Q	STP-256-6302	
												STC	Q	STP-256-6302	
SWP-MOV73A	AUXILIARY BUILDING UNIT COOLER 5 SERVICE WATER SUPPLY HEADER ISOLATION VALVE	09-10C / F-08	B	ACT	3	4	GA	MO	O	O	FAI	RPI	2Y	STP-256-6611	
												ETO	Q	STP-256-6311	
												STO	Q	STP-256-6311	
SWP-MOV73B	AUXILIARY BUILDING UNIT COOLER 5 SERVICE WATER SUPPLY HEADER ISOLATION VALVE	09-10F / D-16	B	ACT	3	4	GA	MO	O	O	FAI	RPI	2Y	STP-256-6611	
												ETO	Q	STP-256-6311	
												STO	Q	STP-256-6311	

Valve Summary Listing - Standard Code ISTC Valves

Page 172 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV74A	AUXILIARY BUILDING UNIT COOLER 5 SERVICE WATER RETURN HEADER ISOLATION VALVE	09-10C / K-06	B	ACT	3	4	GA	MO	O	O/C	FAI	RPI	2Y	STP-256-6611	
												ETC	Q	STP-256-6311	
												ETO	Q	STP-256-6311	
												STC	Q	STP-256-6311	
												STO	Q	STP-256-6311	
SWP-MOV74B	AUXILIARY BUILDING UNIT COOLER 5 SERVICE WATER RETURN HEADER ISOLATION VALVE	09-10F / K-14	B	ACT	3	4	GA	MO	O	O/C	FAI	RPI	2Y	STP-256-6611	
												ETC	Q	STP-256-6311	
												ETO	Q	STP-256-6311	
												STC	Q	STP-256-6311	
												STO	Q	STP-256-6311	

Valve Summary Listing - Standard Code ISTC Valves

Page 173 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV77A	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER SUPPLY HEADER ISOLATION VALVE	09-10B / P-07	B	ACT	3	8	BF	MO	O	O	FAI	RPI	2Y	STP-256-6611	
												ETO	Q	STP-256-6311	
												STO	Q	STP-256-6311	
SWP-MOV77B	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER SUPPLY HEADER ISOLATION VALVE	09-10B / P-05	B	ACT	3	8	BF	MO	O	O	FAI	RPI	2Y	STP-256-6611	
												ETO	Q	STP-256-6311	
												STO	Q	STP-256-6311	

Valve Summary Listing - Standard Code ISTC Valves

Page 174 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV81A	DRYWELL UNIT COOLERS RETURN HEADER A OUTBOARD CONTAINMENT ISOLATION VALVE	09-10D / N-20	A	ACT	2	12	GA	MO	O	O/C	FAI	RPI	2Y	STP-256-6603	
												LTJ	AppJ	STP-256-3828	
												ETC	Q	STP-256-6301	
												ETO	Q	STP-256-6301	
												STC	Q	STP-256-6301	
												STO	Q	STP-256-6301	
SWP-MOV81B	DRYWELL UNIT COOLERS RETURN HEADER B OUTBOARD CONTAINMENT ISOLATION VALVE	09-10D / H-20	A	ACT	2	12	GA	MO	O	O/C	FAI	RPI	2Y	STP-256-6604	
												LTJ	AppJ	STP-256-3829	
												ETC	Q	STP-256-6302	
												ETO	Q	STP-256-6302	
												STC	Q	STP-256-6302	
												STO	Q	STP-256-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 175 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-MOV96A	SERVICE WATER RETURN HEADER A ISOLATION VALVE	09-10B / E-18	B	ACT	3	30	BF	MO	O	C	FAI	RPI	2Y	STP-256-6603	
												ETC	Q	STP-256-6301	
												STC	Q	STP-256-6301	
SWP-MOV96B	SERVICE WATER RETURN HEADER B ISOLATION VALVE	09-10B / E-17	B	ACT	3	30	BF	MO	O	C	FAI	RPI	2Y	STP-256-6604	
												ETC	Q	STP-256-6302	
												STC	Q	STP-256-6302	
SWP-RV119	DRYWELL UNIT COOLERS SERVICE WTR SUPPLY HEADER PRESSURE RELIEF VALVE	09-10D / C-16	C	ACT	2	0.75	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
SWP-RV133	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER OUTLET LINE PRESSURE RELIEF VALVE	09-10B / N-04	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV140	DRYWELL UNIT COOLERS SERVICE WATER RETURN HEADER PRESSURE RELIEF VALVE	09-10D / N-17	C	ACT	2	0.75	RV	SA	C	O	N/A	RV	10Y	STP-000-6606	
SWP-RV1A	CONTAINMENT UNIT COOLER HVR-UC1A THERMAL RELIEF VALVE	09-10D / K-20	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV1B	CONTAINMENT UNIT COOLER HVR-UC1B THERMAL RELIEF VALVE	09-10D / F-18	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV49A	LSV COMPRESSOR SKID A AFTERCOOLER SERVICE WTR SUPPLY HEADER PRESSURE RELIEF VALVE	09-10C / H-21	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 176 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-RV49B	LSV COMPRESSOR SKID B AFTERCOOLER SERVICE WTR SUPPLY HEADER PRESSURE RELIEF VALVE	09-10F / D-18	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV79A	DIESEL GENERATOR AIR START AFTERCOOLER A SERVICE WATER OUTLET PRESSURE RELIEF VALVE	09-10B / M-07	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV79B	DIESEL GENERATOR AIR START AFTERCOOLER B SERVICE WATER OUTLET PRESSURE RELIEF VALVE	09-10B / M-01	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV91A	CNTRL BLDG CHILLED WTR CHILLER CONDENSER A SERVICE WATER OUTLET LINE PRESSURE RELIEF VALVE	09-10B / M-13	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV91B	CNTRL BLDG CHILLED WTR CHILLER CONDENSER B SERVICE WATER OUTLET LINE PRESSURE RELIEF VALVE	09-10B / J-15	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV91C	CNTRL BLDG CHILLED WTR CHILLER CONDENSER C SERVICE WATER OUTLET LINE PRESSURE RELIEF VALVE	09-10B / L-13	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
SWP-RV91D	CNTRL BLDG CHILLED WTR CHILLER CONDENSER D SERVICE WATER OUTLET LINE PRESSURE RELIEF VALVE	09-10B / G-14	C	ACT	3	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	

Valve Summary Listing - Standard Code ISTC Valves

Page 177 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-SOV220A	LSV COMPRESSOR SKID A AFTERCOOLER SERVICE WATER SUPPLY LINE ISOLATION VALVE	09-10C / J-20	B	ACT	3	0.5	GL	SO	C	O	O	RPI	2Y	STP-256-6603	
												ETO	Q	STP-256-6301	
												FSO	Q	STP-256-6301	
												STO	Q	STP-256-6301	
SWP-SOV220B	LSV COMPRESSOR SKID B AFTERCOOLER SERVICE WATER SUPPLY LINE ISOLATION VALVE	09-10F / E-19	B	ACT	3	0.5	GL	SO	C	O	O	RPI	2Y	STP-256-6604	
												ETO	Q	STP-256-6302	
												FSO	Q	STP-256-6302	
												STO	Q	STP-256-6302	

Valve Summary Listing - Standard Code ISTC Valves

Page 178 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-SOV522A	SERVICE WATER AIR ACCUMULATOR TANK A OUTLET LINE SOLENOID ISOLATION VALVE	09-10F / B-18	A	ACT	2	1	GL	SO	C	O/C	C	RPI	2Y	STP-256-6305	
												LTJ	AppJ	STP-256-3830	
												ETC	Q	STP-256-6305	
												ETO	Q	STP-256-6305	
												FSC	Q	STP-256-6305	
												STC	Q	STP-256-6305	
												STO	Q	STP-256-6305	

Valve Summary Listing - Standard Code ISTC Valves

Page 179 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-SOV522B	SERVICE WATER AIR ACCUMULATOR TANK B OUTLET LINE SOLENOID ISOLATION VALVE	09-10F / B-13	A	ACT	2	1	GL	SO	C	O/C	C	RPI	2Y	STP-256-6306	
												LTJ	AppJ	STP-256-3831	
												ETC	Q	STP-256-6306	
												ETO	Q	STP-256-6306	
												FSC	Q	STP-256-6306	
												STC	Q	STP-256-6306	
												STO	Q	STP-256-6306	

Valve Summary Listing - Standard Code ISTC Valves

Page 180 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-SOV522C	SERVICE WATER AIR ACCUMULATOR TANK A OUTLET LINE SOLENOID ISOLATION VALVE	09-10F / B-17	A	ACT	2	1	GL	SO	C	O/C	C	RPI	2Y	STP-256-6305	
												LTJ	AppJ	STP-256-3830	
												ETC	Q	STP-256-6305	
												ETO	Q	STP-256-6305	
												FSC	Q	STP-256-6305	
												STC	Q	STP-256-6305	
												STO	Q	STP-256-6305	

Valve Summary Listing - Standard Code ISTC Valves

Page 181 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-SOV522D	SERVICE WATER AIR ACCUMULATOR TANK B OUTLET LINE SOLENOID ISOLATION VALVE	09-10F / B-12	A	ACT	2	1	GL	SO	C	O/C	C	RPI	2Y	STP-256-6306	
												LTJ	AppJ	STP-256-3831	
												ETC	Q	STP-256-6306	
												ETO	Q	STP-256-6306	
												FSC	Q	STP-256-6306	
												STC	Q	STP-256-6306	
												STO	Q	STP-256-6306	

Valve Summary Listing - Standard Code ISTC Valves

Page 182 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-SOV523A	AUXILIARY BUILDING UNIT COOLERS LOOP A SERVICE WATER RETURN HEADER SOV VENT VALVE	09-10C / M-13	B	ACT	3	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-256-6607	
												ETC	Q	STP-256-6305	
												ETO	Q	STP-256-6305	
												FSC	Q	STP-256-6305	
												STC	Q	STP-256-6305	
												STO	Q	STP-256-6305	
SWP-SOV523B	AUXILIARY BUILDING UNIT COOLERS LOOP B SERVICE WATER RETURN HEADER SOV VENT VALVE	09-10F / N-12	B	ACT	3	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-256-6608	
												ETC	Q	STP-256-6306	
												ETO	Q	STP-256-6306	
												FSC	Q	STP-256-6306	
												STC	Q	STP-256-6306	
												STO	Q	STP-256-6306	

Valve Summary Listing - Standard Code ISTC Valves

Page 183 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-SOV523C	AUXILIARY BUILDING UNIT COOLERS LOOP A SERVICE WATER RETURN HEADER SOV VENT VALVE	09-10C / M-13	B	ACT	3	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-256-6607	
												ETC	Q	STP-256-6305	
												ETO	Q	STP-256-6305	
												FSC	Q	STP-256-6305	
												STC	Q	STP-256-6305	
												STO	Q	STP-256-6305	
SWP-SOV523D	AUXILIARY BUILDING UNIT COOLERS LOOP B SERVICE WATER RETURN HEADER SOV VENT VALVE	09-10F / N-11	B	ACT	3	0.75	GL	SO	C	O/C	C	RPI	2Y	STP-256-6608	
												ETC	Q	STP-256-6306	
												ETO	Q	STP-256-6306	
												FSC	Q	STP-256-6306	
												STC	Q	STP-256-6306	
												STO	Q	STP-256-6306	

Valve Summary Listing - Standard Code ISTC Valves

Page 184 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V1086	SERVICE WATER AIR ACCUMULATOR TANK A INLET CHECK VALVE	09-10F / C-16	C	ACT	3	0.75	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-256-6501	
SWP-V1087	SERVICE WATER AIR ACCUMULATOR TANK B INLET CHECK VALVE	09-10F / C-11	C	ACT	3	0.75	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-256-6502	
SWP-V1091	SERVICE WATER AIR ACCUMULATOR TANK A OUTLET LINE CHECK VALVE	09-10F / B-17	C	ACT	2	1	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6501	
												CVO	CM	STP-256-6501	
SWP-V1092	SERVICE WATER AIR ACCUMULATOR TANK B OUTLET LINE CHECK VALVE	09-10F / B-12	C	ACT	2	1	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6502	
												CVO	CM	STP-256-6502	
SWP-V1095	SERVICE WATER AIR ACCUMULATOR TANK A OUTLET LINE CHECK VALVE	09-10F / B-18	C	ACT	2	1	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6501	
												CVO	CM	STP-256-6501	
SWP-V1098	SERVICE WATER AIR ACCUMULATOR TANK B OUTLET LINE CHECK VALVE	09-10F / B-13	C	ACT	2	1	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6502	
												CVO	CM	STP-256-6502	
SWP-V1102	AUXILIARY BUILDING UNIT COOLERS LOOP A SERVICE WATER RETURN HEADER VENT LINE CHECK VALVE	09-10C / M-13	C	ACT	3	1.5	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6501	
												CVO	CM	STP-256-6501	

Valve Summary Listing - Standard Code ISTC Valves

Page 185 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V1103	AUXILIARY BUILDING UNIT COOLERS LOOP B SERVICE WATER RETURN HEADER VENT LINE CHECK VALVE	09-10F / M-11	C	ACT	3	1.5	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6502	
												CVO	CM	STP-256-6502	
SWP-V1224	STANDBY SERVICE WATER PUMP A DISCHARGE LINE VACUUM BREAKER CHECK VALVE	09-10E / D-10	C	ACT	3	1	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
SWP-V1225	STANDBY SERVICE WATER PUMP C DISCHARGE LINE VACUUM BREAKER CHECK VALVE	09-10E / D-09	C	ACT	3	1	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
SWP-V1226	STANDBY SERVICE WATER PUMP D DISCHARGE LINE VACUUM BREAKER CHECK VALVE	09-10E / D-06	C	ACT	3	1	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	
SWP-V1227	STANDBY SERVICE WATER PUMP B DISCHARGE LINE VACUUM BREAKER CHECK VALVE	09-10E / D-04	C	ACT	3	1	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6617	
												CVC	CM	STP-000-6617	

Valve Summary Listing - Standard Code ISTC Valves

Page 186 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V135	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER SUPPLY HEADER CHECK VALVE	09-10B / P-06	C	ACT	3	8	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6610	
												CVO	CM	STP-256-6311	
SWP-V136	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER SUPPLY HEADER CHECK VALVE	09-10B / P-05	C	ACT	3	8	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6610	
												CVO	CM	STP-256-6311	
SWP-V143	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER RETURN HEADER CHECK VALVE	09-10B / N-04	C	ACT	3	8	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6610	
												CVO	CM	STP-256-6311	
SWP-V144	HPCS DIESEL GEN ENGINE WATER HEAT EXCHANGER SERVICE WATER RETURN HEADER CHECK VALVE	09-10B / N-03	C	ACT	3	8	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6610	
												CVO	CM	STP-256-6311	
SWP-V147	STANDBY SERVICE WATER PUMP A DISCHARGE CHECK VALVE	09-10E / F-10	C	ACT	3	18	CK	SA	O/C	O/C	N/A	CVC	CS	STP-256-6801	CSJ-017
												CVO	CS	STP-256-6801	CSJ-017
SWP-V148	STANDBY SERVICE WATER PUMP C DISCHARGE CHECK VALVE	09-10E / F-09	C	ACT	3	18	CK	SA	O/C	O/C	N/A	CVC	CS	STP-256-6801	CSJ-017
												CVO	CS	STP-256-6801	CSJ-017

Valve Summary Listing - Standard Code ISTC Valves

Page 187 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V149	STANDBY SERVICE WATER PUMP B DISCHARGE CHECK VALVE	09-10E / F-07	C	ACT	3	18	CK	SA	O/C	O/C	N/A	CVC	CS	STP-256-6802	CSJ-017
												CVO	CS	STP-256-6802	CSJ-017
SWP-V150	STANDBY SERVICE WATER PUMP D DISCHARGE CHECK VALVE	09-10E / F-08	C	ACT	3	18	CK	SA	O/C	O/C	N/A	CVC	CS	STP-256-6802	CSJ-017
												CVO	CS	STP-256-6802	CSJ-017
SWP-V153	CNTRL BLDG CHILLED WTR CHILLER CONDENSER A SERVICE WATER RECIRCULATION LINE CHECK VALVE	09-10B / M-17	C	ACT	3	6	CK	SA	O/C	O/C	N/A	CVC	CM	STP-256-6321	
												CVO	CM	STP-256-6321	
SWP-V154	CNTRL BLDG CHILLED WTR CHILLER CONDENSER C SERVICE WATER RECIRCULATION LINE CHECK VALVE	09-10B / L-17	C	ACT	3	6	CK	SA	O/C	O/C	N/A	CVC	CM	STP-256-6321	
												CVO	CM	STP-256-6321	
SWP-V155	CNTRL BLDG CHILLED WTR CHILLER CONDENSER B SERVICE WATER RECIRCULATION LINE CHECK VALVE	09-10B / J-18	C	ACT	3	6	CK	SA	O/C	O/C	N/A	CVC	CM	STP-256-6322	
												CVO	CM	STP-256-6322	

Valve Summary Listing - Standard Code ISTC Valves

Page 188 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V156	CNTRL BLDG CHILLED WTR CHILLER CONDENSER D SERVICE WATER RECIRCULATION LINE CHECK VALVE	09-10B / H-18	C	ACT	3	6	CK	SA	O/C	O/C	N/A	CVC	CM	STP-256-6322	
												CVO	CM	STP-256-6322	
SWP-V172	STANDBY SERVICE WATER PUMPS A & C DISCHARGE HEADER CHECK VALVE	09-10D / P-05	C	ACT	3	30	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6801	
												CVO	CM	STP-256-6801	
SWP-V173	STANDBY SERVICE WATER PUMPS B & D DISCHARGE HEADER CHECK VALVE	09-10D / N-05	C	ACT	3	30	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6802	
												CVO	CM	STP-256-6802	
SWP-V174	DRYWELL UNIT COOLERS SUPPLY HEADER A CHECK VALVE {UPSTRM OF INBOARD CNTMNT ISOL VALVE}	09-10D / B-18	A/C	ACT	2	12	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-256-3820	
												CVC	CM	STP-256-3820	
												CVO	CM	STP-256-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 189 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V175	DRYWELL UNIT COOLERS SUPPLY HEADER B CHECK VALVE {UPSTRM OF INBOARD CNTMNT ISOL VALVE}	09-10D / D-18	A/C	ACT	2	12	CK	SA	O/C	O/C	N/A	LTJ	AppJ	STP-256-3821	
												CVC	CM	STP-256-3821	
												CVO	CM	STP-256-6302	
SWP-V201	DIESEL GENERATOR AIR START AFTERCOOLER A SERVICE WATER OUTLET CHECK VALVE	09-10B / M-06	C	ACT	3	8	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6501	
												CVO	CM	STP-256-6301	
SWP-V202	DIESEL GENERATOR AIR START AFTERCOOLER B SERVICE WATER OUTLET CHECK VALVE	09-10B / M-01	C	ACT	3	8	CK	SA	O/C	O	N/A	BDC	CM	STP-256-6502	
												CVO	CM	STP-256-6302	
SWP-V203	CONTAINMENT UNIT COOLER B SUPPLY HEADER CHECK VALVE {DWNSTRM OF INBOARD CNTMNT ISOL VLV}	09-10D / F-18	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-256-6803	

Valve Summary Listing - Standard Code ISTC Valves

Page 190 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V204	CONTAINMENT UNIT COOLER A SUPPLY HEADER CHECK VALVE {DWNSTRM OF INBOARD CNTMNT ISOL VLV}	09-10D / C-18	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-256-6803	
SWP-V326	SERVICE WATER NORMAL SUPPLY HEADER A INLET CHECK VALVE	09-10B / A-16	C	ACT	3	30	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-256-6601	
SWP-V327	SERVICE WATER NORMAL SUPPLY HEADER B INLET CHECK VALVE	09-10B / C-16	C	ACT	3	30	CK	SA	O/C	C	N/A	BDO	CM	STP-000-6501	
												CVC	CM	STP-256-6601	
SWP-V437	AUXILIARY BUILDING UNIT COOLER 5 SERVICE WATER SUPPLY HEADER CHECK VALVE	09-10C / G-08	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6610	
												CVO	CM	STP-256-6311	
SWP-V516	AUXILIARY BUILDING UNIT COOLER 5 SERVICE WATER SUPPLY HEADER CHECK VALVE	09-10F / D-14	C	ACT	3	4	CK	SA	O/C	O/C	N/A	CVC	CM	STP-000-6610	
												CVO	CM	STP-256-6311	

Valve Summary Listing - Standard Code ISTC Valves

Page 191 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V650	DRYWELL UNIT COOLERS RETURN HEADER A CHECK VALVE {UPSTRM OF INBOARD CNTMNT ISOL VALVE}	09-10D / L-18	C	ACT	2	10	CK	SA	O/C	C	N/A	BDO	Q	STP-000-6501	
												CVC	Q	STP-256-6301	
SWP-V651	DRYWELL UNIT COOLERS RETURN HEADER B CHECK VALVE {UPSTRM OF INBOARD CNTMNT ISOL VALVE}	09-10D / H-17	C	ACT	2	10	CK	SA	O/C	C	N/A	BDO	Q	STP-000-6501	
												CVC	Q	STP-256-6302	
SWP-V77	CNTRL BLDG CHILLED WATER RECIRC PUMP A SERVICE WATER SUCTION LINE MANUAL ISOLATION VALVE	09-10B / M-17	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-256-6321	
SWP-V78	CNTRL BLDG CHILLED WATER RECIRC PUMP C SERVICE WATER SUCTION LINE MANUAL ISOLATION VALVE	09-10B / L-17	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6601	
												CVO	CM	STP-256-6321	

Valve Summary Listing - Standard Code ISTC Valves

Page 192 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
SWP-V79	CNTRL BLDG CHILLED WATER RECIRC PUMP B SERVICE WATER SUCTION LINE MANUAL ISOLATION VALVE	09-10B / J-19	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-256-6322	
SWP-V80	CNTRL BLDG CHILLED WATER RECIRC PUMP D SERVICE WATER SUCTION LINE MANUAL ISOLATION VALVE	09-10B / G-19	C	ACT	3	6	CK	SA	O/C	O	N/A	BDC	CM	STP-000-6602	
												CVO	CM	STP-256-6322	
WCS-MOV172	RWCU BACKWASH RECEIVING TANK PUMPS DISCHARGE HEADER OUTBOARD CONTAINMENT ISOL VALVE	26-03B / D-04	A	ACT	2	2.5	GA	MO	O/C	C	FAI	RPI	2Y	STP-601-6601	
												LTJ	AppJ	STP-601-3825	
												ETC	Q	STP-601-6301	
												STC	Q	STP-601-6301	

Valve Summary Listing - Standard Code ISTC Valves

Page 193 of 193

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
WCS-MOV178	RWCU BACKWASH RECEIVING TANK PUMPS DISCHARGE HEADER INBOARD CONTAINMENT ISOL VALVE	26-03B / D-02	A	ACT	2	2.5	GA	MO	O/C	C	FAI	RPI	2Y	STP-601-6601	
												LTJ	AppJ	STP-601-3825	
												ETC	Q	STP-601-6301	
												STC	Q	STP-601-6301	
WCS-RV144	REACTOR WATER CLEANUP BLOWDOWN LINE PRESSURE RELIEF VALVE {INSIDE CONTAINMENT}	26-03A / G-16	A/C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
												LTJ	AppJ	STP-601-3824	
WCS-RV154	RWCU BACKWASH RECEIVING TANK PUMPS DISCHARGE HEADER PRESSURE RELIEF VALVE	26-03B / D-02	A/C	ACT	2	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
												LTJ	AppJ	STP-601-3825	
WCS-RV31A	REACTOR WATER CLEAN-UP PUMP A SEAL PURGE PRESSURE RELIEF VALVE	36-01A / P-05	C	ACT	3	0.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
WCS-RV31B	REACTOR WATER CLEAN-UP PUMP B SEAL PURGE PRESSURE RELIEF VALVE	36-01A / P-02	C	ACT	3	0.5	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	

Valve Summary Listing - Augmented ISTC Valves

Page 1 of 2

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
CSH-RV230	HPCS DIESEL GEN AIR START AIR RECEIVER PRESSURE RELIEF VALVE	08-09D / J-19	Aug-C	ACT	NC	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
CSH-RV245	HPCS DIESEL GEN AIR START AIR RECEIVER PRESSURE RELIEF VALVE	08-09D / J-15	Aug-C	ACT	NC	0.75	RV	SA	C	O/C	N/A	RV	10Y	STP-000-6606	
DFR-AOV144	AUXILIARY BUILDING FLOOR DRAIN SUMP 5B DISCHARGE HEADER TO RADWSTE ISOLATION VALVE	32-09P / M-03	Aug-B	ACT	NC	3	GA	AO	O	C	C	RPI	2Y	STP-609-6601	
												ETC	2Y	STP-609-6603	VPS-004
												FSC	2Y	STP-609-6603	VPS-004
DFR-AOV145	AUXILIARY BUILDING FLOOR DRAIN SUMP 5A DISCHARGE HEADER TO RADWSTE ISOLATION VALVE	32-09P / D-12	Aug-B	ACT	NC	3	GA	AO	O	C	C	STC	2Y	STP-609-6603	VPS-004
												RPI	2Y	STP-609-6601	
												ETC	2Y	STP-609-6603	VPS-004
DFR-AOV145	AUXILIARY BUILDING FLOOR DRAIN SUMP 5A DISCHARGE HEADER TO RADWSTE ISOLATION VALVE	32-09P / D-12	Aug-B	ACT	NC	3	GA	AO	O	C	C	FSC	2Y	STP-609-6603	VPS-004
												STC	2Y	STP-609-6603	VPS-004
												RPI	2Y	STP-609-6601	

Valve Summary Listing - Augmented ISTC Valves

Page 2 of 2

VALVE ID	FUNCTION	DRAWING/COOR	CAT	ACT/ PASS	CLASS	SIZE	TYPE	ACT	POSITION			TEST REQ	FREQ	PROCEDURE	NOTES
									NORM	SAFE	FAIL				
DFR-V130	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5A DISCHARGE CHECK VALVE	32-09P / C-15	Aug-C	ACT	NC	2	CK	SA	O/C	O/C	N/A	CVC	2Y	STP-609-6603	VPS-006
												CVO	2Y	STP-609-6603	VPS-006
DFR-V131	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5D DISCHARGE CHECK VALVE	32-09P / C-14	Aug-C	ACT	NC	2	CK	SA	O/C	O/C	N/A	CVC	2Y	STP-609-6603	VPS-006
												CVO	2Y	STP-609-6603	VPS-006
DFR-V140	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5B DISCHARGE CHECK VALVE	32-09P / L-06	Aug-C	ACT	NC	2	CK	SA	O/C	O/C	N/A	CVC	2Y	STP-609-6603	VPS-006
												CVO	2Y	STP-609-6603	VPS-006
DFR-V141	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5E DISCHARGE CHECK VALVE	32-09P / L-05	Aug-C	ACT	NC	2	CK	SA	O/C	O/C	N/A	CVC	2Y	STP-609-6603	VPS-006
												CVO	2Y	STP-609-6603	VPS-006
F42-MOVF003	INCLINED FUEL TRANSFER TUBE DRAIN VALVE	34-04A / H-13	Aug-A	ACT	NC	4	BA	MO	C	C	FAI	RPI	2Y	STP-055-6601	VPS-005
												ETC	2Y	STP-055-6301	

CSJ-001

SYSTEM: 107 - FWS – FEEDWATER

GE CODE: B21

Component ID	Code Class	Category	Description
FWS-MOV7A	2	A	REACTOR FEEDWATER LOOP A OUTBOARD CONTAINMENT ISOLATION VALVE
FWS-MOV7B	2	A	REACTOR FEEDWATER LOOP B OUTBOARD CONTAINMENT ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Full-stroke close exercise testing of the listed valves during normal operation would require interrupting feedwater flow to the reactor, through the valve being tested.

Isolation of a single line above 5% power is not recommended by GE due to thermal stress to the RPV. Additionally, an isolation of both feedwater lines during power operation will scram the reactor on low water level.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. Two of these conditions are testing which could place undue stress on components and unnecessarily reduce the life expectancy of plant systems and components.

Partial-stroke exercising of the power operated valves is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1

CSJ-002

SYSTEM: 109 - MSS - MAIN STEAM

GE CODE: B21

Component ID	Code Class	Category	Description
B21-MOVF098A	2	A	MAIN STEAM LINE A SHUT-OFF VALVE
B21-MOVF098B	2	A	MAIN STEAM LINE B SHUT-OFF VALVE
B21-MOVF098C	2	A	MAIN STEAM LINE C SHUT-OFF VALVE
B21-MOVF098D	2	A	MAIN STEAM LINE D SHUT-OFF VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Reactor power would have to be substantially reduced to exercise the listed valves to the closed position. Closing one valve at full power would cause high steam flow on the other three lines and trip the reactor.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. One of these conditions is testing which could result in an unnecessary plant shutdown.

Partial-stroke exercising is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1

CSJ-003

SYSTEM: 122 - IAS - AIR INSTRUMENT

GE CODE: N/A

Component ID	Code Class	Category	Description
IAS-MOV106	2	A	DRYWELL & CONTAINMENT INSTR AIR SUPPLY HEADER ISOLATION MOV

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Exercising this valve to the closed position during normal operation would cause an interruption of instrument air supply to the Main Steam Isolation Valves causing them to shut resulting in a reactor trip.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. Three of these conditions are testing which could result in an unnecessary plant shutdown place undue stress on components and unnecessarily reduce the life expectancy of plant systems and components.

Partial-stroke exercising of the power operated valves is precluded by valve control circuitry which does not allow partial-stroke operation

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1

CSJ-004

SYSTEM: 115 - CCP - CLOSED COOLING WATER - REACTOR PLANTGE CODE: N/A

Component ID	Code Class	Category	Description
CCP-MOV138	2	A	CCP CONTAINMENT SUPPLY HEADER OUTBOARD ISOLATION VALVE
CCP-MOV142	2	B	CCP DRYWELL SUPPLY HEADER OUTBOARD ISOLATION VALVE
CCP-MOV143	2	B	CCP DRYWELL RETURN HEADER OUTBOARD MOTOR OPERATED ISOLATION VALVE
CCP-MOV144	2	B	CCP DRYWELL RETURN HEADER INBOARD MOTOR OPERATED ISOLATION VALVE
CCP-MOV158	2	A	CCP CONTAINMENT RETURN HEADER INBOARD ISOLATION VALVE
CCP-MOV159	2	A	CCP CONTAINMENT RETURN HEADER OUTBOARD ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Performance of the required testing would necessitate isolating cooling water to components essential for plant operation. The exercise testing of the valves during normal operation could cause overheating and damage of the Reactor Recirculation Pump motor and bearings or the Control Rod Drive pump bearings.

Because of the complexity of the required test procedure, the cooling water to the CRD Pump bearings would have to be secured for an extended period of time and damage to the CRD Pumps could result from testing.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. Two of these conditions are testing which could place undue stress on components and unnecessarily reduce the life expectancy of plant systems and components.

Partial-stroke exercising of the power operated valves is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1

CSJ-005**SYSTEM: 203 - CSH - HIGH PRESSURE CORE SPRAY (HPCS)****GE CODE: E22**

Component ID	Code Class	Category	Description
E22-MOVF004	1	A	HIGH PRESSURE CORE SPRAY PUMP DISCHARGE LINE MAIN ISOLATION VALVE

SYSTEM: 204 - RHS - RESIDUAL HEAT REMOVAL - LPCI (RHR)**GE CODE: E12**

Component ID	Code Class	Category	Description
E12-MOVF008	1	A	RESIDUAL HEAT REMOVAL PUMP SHUTDOWN COOLING OUTBOARD ISOLATION VALVE
E12-MOVF009	1	A	RESIDUAL HEAT REMOVAL PUMP SHUTDOWN COOLING INBOARD ISOLATION VALVE
E12-MOVF042A	1	A	RESIDUAL HEAT REMOVAL PUMP A INJECTION RETURN LINE ISOLATION VALVE
E12-MOVF042B	1	A	RESIDUAL HEAT REMOVAL PUMP B INJECTION RETURN LINE ISOLATION VALVE
E12-MOVF042C	1	A	RESIDUAL HEAT REMOVAL PUMP C INJECTION RETURN LINE ISOLATION VALVE
E12-MOVF053A	2	A	RHR HEAT EXCHANGER A SHUTDOWN COOLING RETURN LINE ISOLATION VALVE
E12-MOVF053B	2	A	RHR HEAT EXCHANGER B SHUTDOWN COOLING RETURN LINE ISOLATION VALVE

SYSTEM: 205 - CSL - LOW PRESSURE CORE SPRAY (LPCS)**GE CODE: E21**

Component ID	Code Class	Category	Description
E21-MOVF005	1	A	LOW PRESSURE CORE SPRAY PUMP LPCS INJECTION SHUT OFF VALVE

SYSTEM: 209 - ICS - REACTOR CORE ISOLATION COOLING (RCIC) GE CODE: E51

Component ID	Code Class	Category	Description
E51-MOVF013	2	A	REACTOR CORE ISOL COOLING PUMP INJECTION ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

The exercise testing of the listed valves during normal operation could subject the system piping to pressures and temperatures greater than the design bases. It is assumed for the purpose of the exercise testing that one or more upstream check valves leak by their seats.

Valves E12-MOVF008 and 9 are interlocked with reactor pressure and cannot be opened during normal operation.

Valves E12-MOVF042A/B/C, and E21-MOVF005 are also interlocked with a pressure permissive which precludes opening unless the pressure between the listed valve and the associated downstream check valve is considerably lower than normal reactor pressure. Any seat leakage through the downstream check valves (including leakage within acceptable limits) could subject the low pressure system piping to pressures in excess of design basis if the subject valves were opened.

Valves E12-MOVF053A/B are not interlocked but could also subject the upstream system piping to pressures beyond the design basis if opened during normal power operation. No indication is provided between the subject valves and their associated downstream check valves to verify pressure conditions.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. One of these conditions is testing of valves which when cycled, could subject a system to pressures in excess of their design pressure.

Valves E22-MOVF004 and E51-MOVF013 are not interlocked with a pressure permissive as the upstream system piping between the pump discharge and the RPV is designed for pressure conditions exceeding normal reactor pressure. However, the upstream system piping is not designed for temperature conditions above 170F (E51) and 212F (E22). Opening the subject valves during normal power operation could cause thermal stratification that could subject the piping to thermal stresses beyond the design basis. No indication is provided between the subject valves and their associated downstream check valves to verify the presence of high temperature back leakage.

Partial-stroke exercising of the listed valves is precluded by the same conditions as full-stroke exercising.

ALTERNATE TESTING:

An exercise test for each-valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 3.1.1(3)

CSJ-006**SYSTEM: 109 - MSS - MAIN STEAM****GE CODE: B21**

Component ID	Code Class	Category	Description
B21-AOVF022A	1	A	MAIN STEAM LINE INBOARD ISOLATION VALVE A
B21-AOVF022B	1	A	MAIN STEAM LINE INBOARD ISOLATION VALVE B
B21-AOVF022C	1	A	MAIN STEAM LINE INBOARD ISOLATION VALVE C
B21-AOVF022D	1	A	MAIN STEAM LINE INBOARD ISOLATION VALVE D
B21-AOVF028A	1	A	MAIN STEAM LINE A OUTBOARD ISOLATION VALVE
B21-AOVF028B	1	A	MAIN STEAM LINE B OUTBOARD ISOLATION VALVE
B21-AOVF028C	1	A	MAIN STEAM LINE C OUTBOARD ISOLATION VALVE
B21-AOVF028D	1	A	MAIN STEAM LINE D OUTBOARD ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

The listed valves are partial stroke exercised during operation every 92 days. A full stroke time test on each MSIV is required only at least once per 18 months by the RBS Technical Specifications SR 3.6.1.3.6.

Undesirable pressure transients are created in the RPV which challenge the Reactor Protection System and activate High Neutron Alarms during fast closure of the MSIVs. Also, the limits placed upon the associated main steam high flow trip set point will not allow closure of even one of these valves at full power without initiating a scram.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. One of these conditions is testing which could result in an unnecessary plant shutdown.

ALTERNATE TESTING:

A full stroke exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1

CSJ-007

SYSTEM: 601 - WCS - REACTOR WATER CLEANUP & FILTER (RWCU) GE CODE: G33

Component ID	Code Class	Category	Description
G33-MOVF001	1	A	REACTOR WATER CLEANUP PUMPS SUCTION HEADER INBOARD CONTAINMENT ISOL VALVE
G33-MOVF004	1	A	REACTOR WATER CLEANUP PUMPS SUCTION HEADER OUTBOARD CONTAINMENT ISOL VALVE
G33-MOVF039	2	A	REACTOR WATER CLEANUP REGEN HTEXCHGRS OUTLET LINE OUTBOARD CONTAINMENT ISOLATION VALVE
G33-MOVF040	2	A	REACTOR WATER CLEANUP REGEN HTEXCHGRS OUTLET LINE INBOARD CONTAINMENT ISOLATION VALVE
G33-MOVF053	2	A	REACTOR WATER CLEANUP PUMPS DISCHARGE HEADER INBOARD CONTAINMENT ISOL VALVE
G33-MOVF054	2	A	REACTOR WATER CLEANUP PUMPS DISCHARGE HEADER OUTBOARD CONTAINMENT ISOL VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Closure of the listed valves during operation would cause the Reactor Water Cleanup System (RWCU) to trip on low flow. This system is necessary to maintain reactor water chemistry within Technical Specification limits.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. Two of these conditions are testing which could result in an unnecessary plant shutdown and cause unnecessary cycling of equipment.

Partial-stroke exercising is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1

CSJ-008

SYSTEM: 209 - ICS - REACTOR CORE ISOLATION COOLING (RCIC) GE CODE: E51

Component ID	Code Class	Category	Description
E51-MOVF063	1	A	RCIC & RHR SYSTEMS STEAM SUPPLY ISOLATION VALVE
E51-MOVF064	1	A	REACTOR CORE ISOL COOLING STEAM SUPPLY LINE OUTBOARD CONTAINMENT ISOLATION VALVE
E51-MOVF076	2	A	REACTOR CORE ISOL COOLING WARM-UP LINE ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Failure of either F063 or F064 during the exercise test would result in a complete loss of system function (i.e. RCIC system would be inoperable).

Failure of F076 in the non-conservative position during full or partial stroke exercising would require entry into an LCO for Containment isolation. The LCO action statement would require that valve F064 be isolated. Isolation of valve F064 would cause the complete loss of RCIC system function.

NUREG-1482 provides examples of valves to be excluded from exercising tests during plant operation. One of these examples is all valves whose failure in a non-conservative position during cycling test would cause a loss of system function.

Partial-stroke exercising of the valves is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the last 92 days.

REFERENCES: NUREG-1482, Section 3.1.1(1)

CSJ-009

SYSTEM: 256 - SWP - SERVICE WATER - STANDBY (SSW)

GE CODE: N/A

Component ID	Code Class	Category	Description
SWP-MOV57A	3	B	SERVICE WATER NORMAL SUPPLY HEADER A INLET ISOLATION VALVE
SWP-MOV57B	3	B	SERVICE WATER NORMAL SUPPLY HEADER B INLET ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Full stroke close exercising of the listed valves during normal power operation would result in the low pressure initiation of the Standby Service Water System, a subsequent loss of Normal Service Water (a few seconds), and a turbine trip/reactor scram.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. One of these conditions is testing which could result in an unnecessary plant shutdown.

Partial-stroke exercising is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1

CSJ-010**SYSTEM: 254 - CPM - HYDROGEN MIXING****GE CODE: N/A**

Component ID	Code Class	Category	Description
CPM-MOV1A	2	B	DRYWELL HYDROGEN MIXING TRAIN A OUTLET LINE DRYWELL OUTBOARD ISOLATION VALVE
CPM-MOV1B	2	B	DRYWELL HYDROGEN MIXING TRAIN B OUTLET LINE DRYWELL OUTBOARD ISOLATION VALVE
CPM-MOV2A	2	B	DRYWELL HYDROGEN MIXING TRAIN A INLET LINE DRYWELL OUTBOARD ISOLATION VALVE
CPM-MOV2B	2	B	DRYWELL HYDROGEN MIXING TRAIN B INLET LINE DRYWELL OUTBOARD ISOLATION VALVE
CPM-MOV3A	2	B	DRYWELL HYDROGEN MIXING TRAIN A OUTLET LINE DRYWELL INBOARD ISOLATION VALVE
CPM-MOV3B	2	B	DRYWELL HYDROGEN MIXING TRAIN B OUTLET LINE DRYWELL INBOARD ISOLATION VALVE
CPM-MOV4A	2	B	DRYWELL HYDROGEN MIXING TRAIN A INLET LINE DRYWELL INBOARD ISOLATION VALVE
CPM-MOV4B	2	B	DRYWELL HYDROGEN MIXING TRAIN B INLET LINE DRYWELL INBOARD ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

The test frequency for the listed valves is restricted to cold shutdown conditions to limit the opening of the hydrogen mixing inlet and outlet valves during MODES 1, 2, and 3, because these valves have never been demonstrated capable of closing during accident conditions in the drywell. Technical Specification Surveillance Requirement SR 3.6.3.3.1 restricts testing to 'Every cold shutdown, if not performed within the previous 92 days.' The SR ensures that the hydrogen mixing valves remain closed during Modes 1, 2, and 3, or, if open, are only open for a limited period of time over a 365 day cycle. These valves are classified as active valves with a drywell isolation safety function.

Partial-stroke exercising is precluded by valve control circuitry which does not allow partial-stroke operation.

NUREG-1482 defines extenuating circumstances where extension of the test interval is justified. One of the extenuating circumstances is testing where the system design makes compliance impractical.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 3.1.1(2)

CSJ-011

SYSTEM: 256 - SWP - SERVICE WATER - STANDBY (SSW)

GE CODE: N/A

Component ID	Code Class	Category	Description
SWP-MOV502A	3	B	CONTAINMENT UNIT COOLER A SUPPLY HEADER INBOARD CONTAINMENT ISOLATION VALVE
SWP-MOV502B	3	B	CONTAINMENT UNIT COOLER B SUPPLY HEADER INBOARD CONTAINMENT ISOLATION VALVE
SWP-MOV503A	2	A	CONTAINMENT UNIT COOLER A RETURN HEADER INBOARD CONTAINMENT ISOLATION VALVE
SWP-MOV503B	2	A	CONTAINMENT UNIT COOLER B RETURN HEADER INBOARD CONTAINMENT ISOLATION VALVE
SWP-MOV504A	3	B	FUEL POOL COOLER A SERVICE WATER RETURN LINE ISOLATION VALVE
SWP-MOV504B	3	B	FUEL POOL COOLER B SERVICE WATER RETURN LINE ISOLATION VALVE
SWP-MOV510A	3	B	FUEL POOL COOLER A SERVICE WATER SUPPLY LINE ISOLATION VALVE
SWP-MOV510B	3	B	FUEL POOL COOLER B SERVICE WATER SUPPLY LINE ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Exercising the valves during normal plant operations would result in impurities from the Standby Service Water System being introduced into the essentially pure Reactor Plant Component Cooling Water System and Ventilation Chilled Water System.

Testing during cold shutdown will allow sufficient time to restore normal water purity if cross contamination does occur.

Partial-stroke exercising of the power-operated valves is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

Reference RBC - 40430.

CSJ-012

SYSTEM: 201 - SLS - STANDBY LIQUID CONTROL (SLC)

GE CODE: C41

Component ID	Code Class	Category	Description
C41-MOVF001A	2	B	STANDBY LIQUID CONTROL STORAGE TANK A1 OUTLET VALVE A TO STANDBY LIQUID CONTROL PUMP A
C41-MOVF001B	2	B	STANDBY LIQUID CONTROL STORAGE TANK A1 OUTLET VALVE B TO STANDBY LIQUID CONTROL PUMP B

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

The exercise testing of the valves during normal plant operation will require that the entire system be declared inoperable during the testing and entry into the applicable LCO.

In order to exercise the MOVF001A & B valves, both Standby Liquid Control pumps are required to be isolated at the manual suction isolation valves (simultaneously) due to system cross tie piping configuration.

Opening F001A/B (>20 second valves) would allow some Sodium Pentaborate to mix with the clean water in the pump suction. After exercising the valves, the contaminated water would have to be flushed, and chemical analysis performed on the flushed system water until acceptable system water chemistry is achieved. This procedure could generate a large volume of sodium pentaborate contaminated water which cannot be processed by normal radwaste. During this entire time the system would be inoperable and in an 8 hour LCO condition.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. One of these conditions is testing which could involve a hardship; i.e., a limiting condition of operation for operation of 3 to 4 hours in length. NUREG-1482 also defines extenuating circumstances where extension of the test interval is justified. One of the extenuating circumstances is testing where compliance would result in hardship or unusual difficulty without a compensating increase in level of quality and safety.

Partial-stroke exercising of the power operated valves is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482 Sections, 2.4.5, 3.1.1 and 3.1.2

CSJ-013

SYSTEM: 410 - HVK - HVAC-CHILLED WATER CONTROL BUILDING GE CODE: N/A

Component ID	Code Class	Category	Description
HVK-MOV11A	3	B	CONTROL BLDG CHILLED WTR SURGE TANK 1A ALT MAKE-UP DISCHARGE MOTOR OPERATED ISOLATION VALVE
HVK-MOV11B	3	B	CONTROL BLDG CHILLED WTR SURGE TANK 1B ALT MAKE-UP DISCHARGE MOTOR OPERATED ISOLATION VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

HVK-MOV11A and B are the Chilled Water Loop A and B Compression Tank alternate makeup water supply valves from Standby Service Water (SSW) system. These valves can be opened and closed as needed to maintain the necessary water inventory in the compression tank if the normal Makeup supply is unavailable. These valves have a safety function in the open position to allow SSW makeup flow to the compression tank. They have a safety function in the closed position to prevent over filling the compression tank and maintain chilled water system pressure boundary.

River Bend Station has adopted the Electric Power Research Institute (EPRI) guideline for closed cooling water chemistry. Since adoption, chemistry control of the safety-related Control Building Chilled Water System (HVK) has been a challenge and has resulted in initiation of numerous condition reports due to exceeding specified sulfate and chloride limits. This poor water chemistry challenges long term protection of the system. Operation with elevated-impurities can increase corrosion rates and foul heat transfer surfaces, reducing heat exchanger efficiency. This issue has been identified as an Area for Improvement by an outside assessment agency. Investigation has revealed that quarterly stroking HVK-MOV11A&B is the primary contributor to the out of spec water chemistry as these valves provide isolation between the essentially pure HVK system and heavily treated SSW system.

The primary method used to remove impurities in the HVK system is through feed and bleed evolutions. This method has been less than successful due to system availability and divisional protected train restrictions, resulting in prolonged periods with out of specification chemistry. Because this system is considered an essentially pure water system, it is not designed for chemical addition. Additionally, chemical biocide treatments demonstrated effective for use in closed loop systems also add significant levels of chlorides, which are corrosive to otherwise unprotected metallurgies.

Testing during cold shutdown will allow sufficient time to restore water purity after stroke testing and minimize the potential for out of specification water chemistry of the HVK system.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. Two of these conditions are testing which could place undue stress on components and unnecessarily reduce the life expectancy of plant systems and components.

Partial-stroke exercising quarterly is precluded by the same conditions as full-stroke exercising.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1; CR-RBS-2009-01666

CSJ-017

SYSTEM: 256 - SWP - SERVICE WATER - STANDBY (SSW)

GE CODE: N/A

Component ID	Code Class	Category	Description
SWP-V147	3	B	SERVICE WATER PUMP A DISCHARGE CHECK VALVE
SWP-V148	3	B	SERVICE WATER PUMP C DISCHARGE CHECK VALVE
SWP-V149	3	B	SERVICE WATER PUMP B DISCHARGE CHECK VALVE
SWP-V150	3	B	SERVICE WATER PUMP D DISCHARGE CHECK VALVE

TEST REQUIREMENT:

Quarterly exercise testing in accordance with the Code.

BASIS:

Full stroke close exercising of the listed valves during normal power operation would result in the low pressure initiation of the Standby Service Water System, a subsequent loss of Normal Service Water (a few seconds), and a turbine trip/reactor scram.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. One of these conditions is testing which could result in an unnecessary plant shutdown.

ALTERNATE TESTING:

An exercise test of each valve during cold shutdown, if not performed within the previous 92 days.

REFERENCES:

NUREG-1482, Section 2.4.5, 3.1

ROJ-001

SYSTEM: 052 - RDS - CONTROL ROD DRIVE HYDRAULIC (CRD)

GE CODE: C11

Component ID	Code Class	Category	Description
C11-MOVF083	2	A	CONTROL ROD DRIVE PUMP DISCHARGE HEADER CONTAINMENT ISOLATION VALVE

TEST REQUIREMENT:

Quarterly and Cold Shutdown exercise testing in accordance with the Code.

BASIS:

Exercising this valve quarterly or at Cold Shutdown would interrupt seal water flow to the recirculation pump shaft seals, and could result in damage to the seals. Additionally, shutting down CRD to the HCU's at low reactor pressure requires venting of the 145 HCU's per the SOP, which could delay plant startup.

NUREG-1482 defines impractical conditions which are a basis for deferral of testing. One of these conditions is testing of valves in support systems that perform a function vital to the continued operation of the reactor coolant pumps, such as component cooling and the supply and return of seal water. Exercising this valve when the pumps are operating could result in pump damage.

Partial-stroke exercising of the power operated valve is precluded by valve control circuitry which does not allow partial-stroke operation.

ALTERNATE TESTING:

An exercise test of this valve will be performed during every refueling outage.

REFERENCES:

NUREG-1482, Section 3.1.1.4

SYSTEM: 107 – FWS – FEEDWATER**GE CODE: B21**

Component ID	Code		Description
	Class	Category	
B21-AOVF032A	1	A/C	REACTOR FEEDWATER INLET HEADER A OUTBOARD AIR OPERATED CHECK VALVE
B21-AOVF032B	1	A/C	REACTOR FEEDWATER INLET HEADER B OUTBOARD AIR OPERATED CHECK VALVE
B21-VF010A	1	A/C	REACTOR FEEDWATER INLET HEADER A INBOARD CHECK VALVE
B21-VF010B	1	A/C	REACTOR FEEDWATER INLET HEADER B INBOARD CHECK VALVE

TEST REQUIREMENT:

Quarterly and Cold Shutdown testing in accordance with the Code

BASIS:

These check valves are the inboard and outboard primary containment isolation valves for the Feedwater system, which is normally inservice during plant operation. These normally open check valves are required to be exercised to both the open and closed position. The closed position exercise is verified by leakage testing while the open exercise is accomplished when the systems are placed back into service, generally following a refueling outage. Attaining the desired system flow ensures that the valves have been exercised open while attaining a satisfactory leakage rate verifies the valves exercised closed. Therefore, quarterly or cold shutdown testing is impractical due to prolonged periods of component inoperability and increased exposure to radiation.

The Feedwater System is the normal method of level control for the reactor vessel. Testing of these valves can only be performed during prolonged shutdowns when other sources of level control are available and area radiation levels are reduced. Therefore, quarterly or cold shutdown testing is impractical due to prolonged system shutdowns and unnecessary exposure to radiation.

These valves are open during normal plant operation and normally remain open during cold shutdown, therefore, imposing restrictions to exercise to the open and closed position to allow use of nonintrusive test techniques is not practical. Open and close test need only be performed at an interval when it is practicable to perform both tests.

ALTERNATE TESTING:

Perform valves B21 AOVF032A, B21 AOVF032B, B21-VF010A and B21-VF010B exercising in the open and closed directions during refueling outages.

REFERENCES:

ISTC-3522, Category C Check Valves
NUREG-1482, Section 4.1.6

ROJ-004**SYSTEM: 202 – SVV - SVV COMPRESSORS/DRYERS****GE CODE: N/A**

Component ID	Code Class	Category	Description
B21-VF036A	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR A AIR INLET CHECK VALVE
B21-VF036F	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR F AIR INLET CHECK VALVE
B21-VF036G	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR G AIR INLET CHECK VALVE
B21-VF036J	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR J AIR INLET CHECK VALVE
B21-VF036L	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR L AIR INLET CHECK VALVE
B21-VF036M	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR M AIR INLET CHECK VALVE
B21-VF036N	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR N AIR INLET CHECK VALVE
B21-VF036P	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR P AIR INLET CHECK VALVE
B21-VF036R	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR R AIR INLET CHECK VALVE
B21-VF039B	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR B AIR INLET CHECK VALVE
B21-VF039C	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR C AIR INLET CHECK VALVE
B21-VF039D	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR D AIR INLET CHECK VALVE
B21-VF039E	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR E AIR INLET CHECK VALVE
B21-VF039H	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR H AIR INLET CHECK VALVE
B21-VF039K	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR K AIR INLET CHECK VALVE
B21-VF039S	2	A/C	MAIN STEAM RELIEF VALVE AIR OPERATOR ACCUMULATOR S AIR INLET CHECK VALVE

TEST REQUIREMENT:

Quarterly and Cold Shutdown testing in accordance with the Code

BASIS:

These check valves prevent depressurization of the non-ADS SRV's air accumulators on a loss of instrument air and the ADS SRV's air accumulators on a loss of Safety Related Instrument Air. To perform the open and close exercise of these non-ADS and ADS accumulator supply check valves on a quarterly or cold shutdown frequency, access is required into the drywell for valve manipulations, test equipment installation and depressurization of the instrument air.

Performance of these tests during operation would expose personnel to high neutron radiation. During Cold Shutdowns, personnel would still experience unnecessary radiation exposure. This testing would also make the Instrument Air System (which supplies engineered safety features systems) to the containment and drywell and the Safety Related Instrument Air System inoperative for an extended period of time. Therefore, quarterly or cold shutdown testing is impractical due to isolation of instrument air to safety-related systems and extensive test setup time.

ALTERNATE TESTING:

Perform open and closed valve exercising during refueling outages when the drywell can be safely entered without exposing personnel to excessive amounts of radiation.

REFERENCES:

ISTC-3522, Category C Check Valves
NUREG-1482, Section 4.1.6

ROJ-005

SYSTEM: 609–DFR–EQUIPMENT DRAINS–REACTOR BUILDING

GE CODE: N/A

Component ID	Code		Description
	Class	Category	
DFR-V181	2	C	AUX BLDG FLOOR DRAIN SUMP PUMPS 5B / 5E DISCHARGE HDR TO SUPPRESSION POOL CHECK VALVE
DFR-V182	2	C	AUX BLDG FLOOR DRAIN SUMP PUMPS 5A / 5D DISCHARGE HDR TO SUPPRESSION POOL CHECK VALVE

TEST REQUIREMENTS:

Quarterly and Cold Shutdown testing in accordance with the Code

BASIS:

The above listed valves are safety-related valves. These valves have a safety function open to provide a flow path from the auxiliary building floor drain sump pumps to the suppression pool. These pumps keep areas which contain emergency core cooling system (ECCS) electrical components from flooding following a loss of coolant accident (LOCA) and returns post-LOCA leakage from ECCS piping in the auxiliary building crescent area to the suppression pool to maintain long-term post-accident suppression pool inventory. This valve closes to prevent diversion of flow through the inactive auxiliary building floor drain sump pump.

10CFR50.55a, Appendix A, General Design Criterion – 1 and 10CFR50, Appendix B, Criterion XI, require that components important to safety be tested commensurate with the required safety function. These valves are tested commensurate with their safety function in accordance with Technical Requirements Manual (TRM) per Technical Surveillance Requirement (TSR) 3.5.4.2 every 24 months.

ALTERNATE TESTING:

A functional test of each Suppression Pool Pumpback System valve will be performed to verify the flow path can be aligned to the suppression pool every 24 months in accordance with TRM TSR 3.5.4.2.

REFERENCES:

Technical Requirements Manual TRM 3.5.4, Suppression Pool Pumpback System
NUREG-1482, Section 2.2

ROJ-006

SYSTEM: 204 – RHS – RESIDUAL HEAT REMOVAL – LPCI (RHR)	GE CODE: E12
204 – CSL – LOW PRESSURE CORE SPRAY (LPCS)	GE CODE: E21
203 – CSH – HIGH PRESSURE CORE SPRAY (HPCS)	GE CODE: E22

Component ID	Code		Description
	Class	Category	
E12-AOVF041A	1	A/C	RESIDUAL HEAT REMOVAL PUMP A INJECTION LINE TESTABLE CHECK VALVE
E12-AOVF041B	1	A/C	RESIDUAL HEAT REMOVAL PUMP B INJECTION LINE TESTABLE CHECK VALVE
E12-AOVF041C	1	A/C	RESIDUAL HEAT REMOVAL PUMP C INJECTION LINE TESTABLE CHECK VALVE
E21-AOVF006	1	A/C	LOW PRESSURE CORE SPRAY PUMP INJECTION INSIDE DRYWELL CHECK VALVE
E22-AOVF005	1	A/C	HIGH PRESSURE CORE SPRAY PUMP DISCHARGE HEADER CHECK VALVE INSIDE DRYWELL

TEST REQUIREMENT:

Quarterly and Cold Shutdown testing in accordance with the Code

BASIS:

These valves provide pressure isolation of the reactor coolant pressure boundary between the high pressure reactor coolant system and other safety related systems containing low pressure designed components. These pressure isolation valves maintain one of the two high to low pressure barriers during plant operation. To exercise these valves during plant operation would involve a loss of one isolation barrier. The possibility of an internal loss of coolant accident is significantly increased by exercising these valves quarterly. Therefore, conformance to the quarterly exercise requirement is impractical for the facility due to the potential for equipment damage.

During Cold Shutdowns, these valves require removal of their end covers to provide access to the nut that is used for mechanical exercising of the check valves. These valves are located in the Drywell and as such would require personnel to experience unnecessary radiation exposure for end cover removal, check valve exercising, and end cover replacement.

The open exercise is performed by establishing greater than or equal to 4500 gpm for E12-AOVF041A or E12-AOVF041B if placing the system into shutdown cooling or by mechanical exercising, which requires removal of the end covers. Open exercising for E12-AOVF041C and

E21-AOVF006 is performed by mechanical exercising, which requires removal of the end covers. Open exercising of the E22-AOVF005 is performed by flow testing with a test hose due to its AOV actuator being removed. All five (5) valves closed exercise will be satisfied by obtaining acceptable leak rate results during the refueling outage.

ALTERNATE TESTING:

Perform the open and close exercising during refueling outage when reactor pressure has been reduced to below the design pressure of attached piping and components. In addition a refueling outage permits more controlled access for the maintenance removal of the end cover.

REFERENCES:

ISTC-3522, Category C Check Valves
NUREG-1482, Section 4.1.6

ROJ-007

SYSTEM: 107 – FWS – FEEDWATER

GE CODE: B21

Component ID	Code		Description
	Class	Category	
FWS-V3052	2	A/C	REACTOR FEEDWATER INLET HEADER A CHECK VALVE

TEST REQUIREMENT:

Quarterly and Cold Shutdown testing in accordance with the Code

BASIS:

This check valve is located in the A Feedwater system header, which is normally inservice during plant operation. This check valve has a safety function close to prevent diversion of flow from the Reactor Core Isolation Cooling (RCIC) system to the non-safety related Feedwater system. This normally open check valve is required to be exercised to both the open and closed position. The closed position exercise is verified by leakage testing while the open exercise is accomplished when the system is placed back into service, generally following a refueling outage. Attaining the desired system flow ensures that the valve has been exercised open while attaining a satisfactory leakage rate verifies the valve exercised closed. Therefore, quarterly or cold shutdown testing is impractical due to prolonged periods of component inoperability and increased exposure to radiation.

The Feedwater System is the normal method of level control for the reactor vessel. Testing of this valve can only be performed during prolonged shutdowns when other sources of level control are available and area radiation levels are reduced. Therefore, quarterly or cold shutdown testing is impractical due to prolonged system shutdowns and unnecessary exposure to radiation.

This valve is open during normal plant operation and closed during cold shutdown, therefore, imposing restrictions to exercise to the open and closed position to allow use of nonintrusive test techniques is not practical. Open and close test need only be performed at an interval when it is practicable to perform both tests.

ALTERNATE TESTING:

Perform valve FWS-V3052 exercising in the open and closed directions during refueling outages.

REFERENCES:

ISTC-3522, Category C Check Valves
NUREG-1482, Section 4.1.6

ROJ-008

SYSTEM: 204 – RHS – RESIDUAL HEAT REMOVAL – LPCI (RHR)

GE CODE: E12

Component ID	Code		Description
	Class	Category	
RHS-V240	1	A/C	RESIDUAL HEAT REMOVAL PUMP C SHUTDOWN COOLING INLET CHECK VALVE

TEST REQUIREMENTS:

Quarterly and Cold Shutdown testing in accordance with the Code

BASIS:

This check valve provides Pressure Isolation for the Reactor Coolant Pressure Boundary System and provides thermal relief for the shutdown cooling suction penetration. During cold shutdowns, technical specifications require that two modes of shutdown cooling, and two ECCS systems be maintained operable unless the plant is in the refueling mode with the reactor vessel head removed and the cavity flooded. Open and closed exercising of this valve, which is located in the shutdown cooling supply line, is accomplished by performing leak rate testing. To perform this testing in any mode other than refueling renders one or more ECCS and shutdown cooling modes inoperable, in violation of Technical Specifications. Testing of this valve during the actual refueling outage ensures that adequate alternate means of decay heat removal exists and enhances system availability.

Therefore, performing the open and close exercising of the RHS-V240 simple check valve quarterly or during cold shutdown is impractical due to prolonged system inoperability and an increased exposure to radiation.

ALTERNATE TESTING:

Perform valve open and closed exercising during refueling outages when plant conditions permit testing without violating Technical Specifications.

REFERENCES:

ISTC-3522, Category C Check Valves
NUREG-1482, Section 4.1.6

VPS-003

SYSTEM: 610 - SSR - REACTOR PLANT SAMPLING (PASS)

GE CODE:

Component ID	Code Class	Category	Description
SSR-SOV133	2	A	REACTOR SAMPLING SYSTEM SAMPLE STATION CNTMNT ATMOSPHERE & LEAK MONIT SMPL LINE ISOL VALVE
SSR-SOV134	2	A	REACTOR SAMPLING SYSTEM SAMPLE STATION CNTMNT ATMOSPHERE & LEAK MONIT SMPL LINE ISOL VALVE
SSR-SOV140	2	A	REACTOR SAMPLING SYSTEM SAMPLE STATION CONTAINMENT ATMOSPHERE & LEAK MONIT SMPL LINE ISOL VLV

TEST REQUIREMENT:

Leakage rate testing in accordance with the Code at a 2 Year frequency.

ALTERNATE TESTING:

Leakage rate testing in accordance with the Code at a frequency governed by the 10CFR50, Appendix J program.

BASIS:

The listed valves perform a containment isolation function and are required to be tested in accordance with 10CFR, Appendix J as stipulated in Tech. Spec. Surveillance Requirement SR 3.6.1.3.12. The Code states that "Category A valves, which perform a function other than containment isolation, shall be tested to verify their leak-tight integrity at a frequency of two years". Since these valves are category A valves due to their containment isolation function, they meet the requirements of Containment Isolation Valves in accordance with the Code, even though they are not listed on TRM Table 3.6.1.3-1 and USAR Table 6.2-40. Therefore, they should be tested in accordance with the 10CFR50, Appendix J program.

REFERENCES:

ER 99-0257

APPROVAL:

Not Applicable

VPS-004

SYSTEM: 609 - DFR – FLOOR DRAINS – REACTOR BUILDING

GE CODE:

Component ID	Code Class	Category	Description
DFR-AOV144	NC	Aug-B	AUXILIARY BUILDING FLOOR DRAIN SUMP 5B DISCHARGE HEADER TO RADWASTE ISOLATION VALVE
DFR-AOV145	NC	Aug-B	AUXILIARY BUILDING FLOOR DRAIN SUMP 5A DISCHARGEHEADER TO RADWASTE ISOLATION VALVE

TEST REQUIREMENT:

Stroke time measurement in accordance with the Code

ALTERNATE TESTING:

A functional test of each Suppression Pool Pumpback System valve will be performed to verify the flow path can be aligned to the suppression pool every 24 months in accordance with TRM Surveillance Requirement TSR 3.5.4.2.

BASIS:

The above listed valves are safety-related, non-ASME valves. They were not designed and constructed in accordance with ASME Section III and are not required to be tested in accordance with the requirements of the Code as delineated in 10CFR50.55a. 10CFR50.55a, Appendix A, General Design Criterion – 1 and 10CFR50, Appendix B, Criterion XI, require that components important to safety be tested commensurate with the required safety function. These valves are tested commensurate with their safety function in accordance with TSR 3.5.4.2.

REFERENCES:

NUREG-1482, Section 2.2

APPROVAL:

These components are non-ASME. NRC approval is not required per NUREG-1482.

VPS-005

SYSTEM: 055 – SFT - REFUELING EQUIPMENTDFR

GE CODE: F42

Component ID	Code Class	Category	Description
F42-MOVF003	NC	Aug-A	INCLINE TUBE TRANSFER TUBE DRAIN VALVE

TEST REQUIREMENT:

Stroke time measurement in accordance with the Code

ALTERNATE TESTING:

A manual exercise of the valve will be performed prior to removal of the Incline Fuel Transfer System (IFTS) blind flange during modes 1, 2, or 3, and biannually thereafter until either the blind flange is reinstalled, or the plant is placed in a condition where Primary Containment is no longer required.

BASIS:

The above listed valve is a safety-related, non-ASME valve. It was not designed and constructed in accordance with ASME Section III, and does not have a safety-related power supply. This valve provides a drain path during operation of IFTS. With the IFTS blind flange removed, this valve is considered a Primary Containment Isolation valve, and is maintained in accordance with the Primary Containment Leakage Rate Testing Program to ensure leak tightness of the valve. The normal method of closure is for the motor-operated valve to be electrically closed by the operator from the IFTS panel. However, because the power is non-safety related, a dedicated operator will be stationed in a low dose area in the vicinity of the valve whenever the valve is opened with the blind flange removed during modes 1, 2, or 3. The dedicated operator is to manually close the drain valve if it fails to close properly, or either at the direction of the control room or upon a LOOP. Because of this committed operator action, it is appropriate to exercise this valve as a manual valve to ensure it can be closed by the operator to meet the above commitment. Because it was not constructed to ASME Section III requirements, it is not required to be tested in accordance with the requirements of the Code as delineated in 10CFR50.55a. 10CFR50, Appendix A, General Design Criterion - 1 and 10CFR50, Appendix B, Criterion XI, require that components 'important to safety' be tested commensurate with the required safety function. This valve is tested commensurate with its safety function.

REFERENCES:

NUREG-1482, Section 2.2

APPROVAL:

This component is non-ASME. NRC approval is not required per NUREG-1482.

VPS-006

SYSTEM: 609–DFR–EQUIPMENT DRAINS–REACTOR BUILDING

GE CODE: N/A

Component ID	Code		Description
	Class	Category	
DFR-V130	NC	Aug-C	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5A DISCHARGE CHECK VALVE
DFR-V131	NC	Aug-C	AUXILIARY BUILDING FLOOR DRAIN.SUMP PUMP 5D DISCHARGE CHECK VALVE
DFR-V140	NC	Aug-C	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5B DISCHARGE CHECK VALVE
DFR-V141	NC	Aug-C	AUXILIARY BUILDING FLOOR DRAIN SUMP PUMP 5E DISCHARGE CHECK VALVE

TEST REQUIREMENTS:

Quarterly and Cold Shutdown testing in accordance with the Code

BASIS:

The above listed valves are safety-related, non-ASME valves. They were not designed and constructed in accordance with ASME Section III. However, these valves were found to have an Augmented safety function open to provide a flow path from the auxiliary building floor drain sump pumps to the suppression pool. These pumps keep areas which contain emergency core cooling system (ECCS) electrical components from flooding following a loss of coolant accident (LOCA) and returns post-LOCA leakage from ECCS piping in the auxiliary building crescent area to the suppression pool to maintain long-term post-accident suppression pool inventory. This valve closes to prevent diversion of flow through the inactive auxiliary building floor drain sump pump.

10CFR50.55a, Appendix A, General Design Criterion – 1 and 10CFR50, Appendix B, Criterion XI, require that components important to safety be tested commensurate with the required safety function. These valves are tested commensurate with their safety function in accordance with Technical Requirements Manual (TRM) per Technical Surveillance Requirement (TSR) 3.5.4.2 every 24 months.

ALTERNATE TESTING:

A functional test of each Suppression Pool Pumpback System valve will be performed to verify the flow path can be aligned to the suppression pool every 24 months in accordance with TRM TSR 3.5.4.2.

REFERENCES:

Technical Requirements Manual TRM 3.5.4, Suppression Pool Pumpback System
NUREG-1482, Section 2.2

APPROVAL:

Not Applicable

RBS, River Bend Station
10 CFR 50.55a Relief Request Number VRR-RBS-2017-1
Proposed Alternative In Accordance with 10 CFR 50.55a(z)(1) Acceptable Level of Quality and Safety

1. American Society of Mechanical Engineers (ASME) Code Component(s) Affected

<u>Valve ID</u>	<u>Function</u>	<u>Category</u>	<u>Class</u>
B21-RVF041A	MAIN STEAM LINE A PRESSURE RELIEF VALVE	B/C	1
B21-RVF041B	MAIN STEAM LINE B AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	B/C	1
B21-RVF041C	MAIN STEAM LINE C AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	B/C	1
B21-RVF041D	MAIN STEAM LINE D AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	B/C	1
B21-RVF041F	MAIN STEAM LINE B AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	B/C	1
B21-RVF041G	MAIN STEAM LINE C PRESSURE RELIEF VALVE	B/C	1
B21-RVF041L	MAIN STEAM LINE C PRESSURE RELIEF VALVE	B/C	1
B21-RVF047A	MAIN STEAM LINE A AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	B/C	1
B21-RVF047B	MAIN STEAM LINE B PRESSURE RELIEF VALVE	B/C	1
B21-RVF047C	MAIN STEAM LINE C AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	B/C	1
B21-RVF047D	MAIN STEAM LINE D PRESSURE RELIEF VALVE	B/C	1
B21-RVF047F	MAIN STEAM LINE B PRESSURE RELIEF VALVE	B/C	1
B21-RVF051B	MAIN STEAM LINE B PRESSURE RELIEF VALVE	B/C	1
B21-RVF051C	MAIN STEAM LINE C PRESSURE RELIEF VALVE	B/C	1
B21-RVF051D	MAIN STEAM LINE D PRESSURE RELIEF VALVE	B/C	1
B21-RVF051G	MAIN STEAM LINE C AUTO DEPRESSURIZATION SYSTEM PRESSURE RELIEF VALVE	B/C	1

2. Applicable ASME Code Edition and Addenda

ASME OM Code-2004 Edition, with Addenda through and including ASME OM Code-2006.

3. Applicable Code Requirement(s)

OM Code 2004 Edition with addenda through OM Code 2006 Addenda Mandatory Appendix I 1-1320(a), "Test Frequencies, Class 1 Pressure Relief Valves" specifies that Class 1 pressure relief valves shall be tested at least once every S 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 S-year interval, if they exist. The test interval for any individual valve shall not exceed S years."

4. Reason for Request

Pursuant to 10 CFR 50.55a, "Codes and Standards", paragraph (z)(2), an alternative is requested when using the requirements of ASME OM Code-2004 Edition with addenda through OM Code-2006 Addenda ISTB (as listed above).

The ASME Code committees have developed Code Case OMN-17, "Alternative Rules for Testing ASME Class 1 Pressure Relief/Safety Valves," which was published via ASME OM Code-2009 Edition. This Code Case has not been approved for use in US NRC Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code, Revision 1, dated August 2014. The Code Case allows the Owner to extend the test frequencies for Class 1 pressure relief valves to a 72-month (6-year) test interval providing all the requirements of the Code Case are satisfied. The Code applicability specified in the Code Case is, in part, ASME OM Code 2001 Edition through the 2006 Addenda of Appendix I, Section 1-1320. This is consistent with the Interval Code of record for RBS. RBS currently meets or exceeds all the requirements specified in Code Case OMN-17. The Code Case OMN-17, is listed in the Draft Regulatory Guide DG-1297 (Proposed Revision 2 to Regulatory Guide 1.192, dated March 2016), and is listed in Table 1, Acceptable OM Code Cases, and as per 10 CFR 50.55a licensees or applicants are to implement the most recent version of a Code Case. River Bend is using OMN-17, as published in the 2012 Edition of the ASME OM Code.

All SRVs are located in the upper elevations of the RBS Drywell. The major contributors to radiation exposure are the Main Steam Lines, including the SRVs, and the High Pressure/Low Pressure Core Spray lines passing through the area. Removal of an installed SRV and installation of a replacement SRV requires installation of scaffolding, removal of insulation and various appurtenances on the SRV, and unbolting the SRV. Once unbolted, the SRV is maneuvered from its location and lowered to the grade

elevation and transported through the drywell and containment equipment hatches. Each SRV weighs approximately 3000 pounds, and due to its size, a crew of five to seven personnel is necessary to safely move each valve. Entergy has evaluated the historical cumulative radiation exposure at RBS for removal and replacement of SRVs from the last five RBS refueling outages. The work evolutions necessary to remove and replace these valves each refueling outage, which includes the removal and replacement of eight SRVs, are conducted under equivalent radiological conditions and with the same personnel requirements. Based on this data, Entergy has concluded that the expected cumulative radiation exposure to remove and replace a single SRV would be approximately 0.594 person-rem [roentgen equivalent man]... Therefore, absent the requested relief, replacement of eight incremental SRVs would result in approximately 4.752 additional person-rem over three refueling outages.

5. Proposed Alternative and Basis for Use

As an alternative to the Code required 5-year test interval per Appendix I, paragraph 1-1320(a), RBS proposes that the Class 1 pressure relief valves be tested at least once every three refueling cycles (approximately 6 years/72 months) with a minimum of 20% of the valves tested within any 24-month interval. This 20% would consist of valves that have not been tested during the current 72-month interval, if they exist. The test interval for any individual valve would not exceed 72 months except that a 6-month grace period is allowed to coincide with refueling outages to accommodate extended shutdown periods. After as-found set pressure testing, the valves shall be disassembled and inspected to verify that parts are free of defects resulting from time-related degradation or service induced wear. As-left set pressure testing shall be performed following maintenance and prior to returning the valve to service. Each valve shall have been disassembled and inspected prior to the start of the 72 month interval. Disassembly and inspection performed prior to the implementation of Code Case OMN-17 may be used. The relief valve testing and maintenance cycle at RBS consists of removal of the SRV complement requiring testing and transportation to an off-site test facility. Upon receipt at the off-site facility the valves are subject to an as-found inspection, seat leakage and set pressure testing. Prior to the return of a complement of SRVs for installation in the plant, the valves are disassembled and inspected to verify that internal surfaces and parts are free from defects or service induced wear prior to the start of the next test interval. During this process, anomalies or damage are identified and resolved. Damaged or worn parts, springs, gaskets and seals are replaced as necessary. The valve seats are lapped, if necessary. Following reassembly, the valve's set pressure is recertified with an acceptance criterion of ± 1 %. This existing process is in accordance with ASME OM Code Case OMN-17, Paragraphs (d) and (e). RBS has reviewed the as-found set pressure test results for all of the SRVs tested since 2008. RBS has had only one as-found test failure since 2008 that exceeded the as-found acceptance criteria (+3%, -5%). The one as-found failure was in the negative (or conservative) direction.

RBS, River Bend Station
10 CFR 50.55a Relief Request Number VRR-RBS-2017-1
Proposed Alternative In Accordance with 10 CFR 50.55a(z)(1) Acceptable Level of Quality and Safety

6. Duration of proposed Alternative

This relief is requested for the fourth ten year IST interval, which begins December 2, 2017 and is scheduled to end on December 1, 2027.

7. Precedent

N/A

The NRC approved this Relief Request by letter dated 5/24/2017.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 1 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B21-VF024A

Valves in Grouping: B21-VF024A

CM Testing Requirements: Perform open flow testing and closed testing at a frequency that may be extended to every 3R.

Condition Monitoring Justification: B21-VF024B

Valves in Grouping: B21-VF024B

CM Testing Requirements: Perform open flow testing and closed testing at a frequency that may be extended to every 3R.

Condition Monitoring Justification: B21-VF024C

Valves in Grouping: B21-VF024C

CM Testing Requirements: Perform open flow testing and closed testing at a frequency that may be extended to every 3R.

Condition Monitoring Justification: B21-VF024D

Valves in Grouping: B21-VF024D

CM Testing Requirements: Perform open flow testing and closed testing at a frequency that may be extended to every 3R.

Condition Monitoring Justification: B21-VF029A

Valves in Grouping: B21-VF029A

CM Testing Requirements: Perform open flow testing and closed testing at a frequency that may be extended to every 3R.

Condition Monitoring Justification: B21-VF029B

Valves in Grouping: B21-VF029B

CM Testing Requirements: Perform open flow testing and closed testing at a frequency that may be extended to every 3R.

Condition Monitoring Justification: B21-VF029C

Valves in Grouping: B21-VF029C

CM Testing Requirements: Perform open flow testing and closed testing at a frequency that may be extended to every 3R.

Condition Monitoring Justification: B21-VF029D

Valves in Grouping: B21-VF029D

CM Testing Requirements: Perform open flow testing and closed testing at a frequency that may be extended to every 3R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 2 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B21-VF037A

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037B

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037C

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037D

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 3 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B21-VF037E

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037F

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037G

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037H

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 4 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B21-VF037J

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037K

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037L

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037M

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 5 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B21-VF037N

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037P

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037R

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF037S

Valves in Grouping: B21-VF037A, B21-VF037B, B21-VF037C, B21-VF037D, B21-VF037E, B21-VF037F, B21-VF037G, B21-VF037H, B21-VF037J, B21-VF037K, B21-VF037L, B21-VF037M, B21-VF037N, B21-VF037P, B21-VF037R, & B21-VF037S

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 6 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B21-VF078A

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078B

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078C

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078D

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078E

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078F

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 7 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B21-VF078G

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078H

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078J

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078K

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078L

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078M

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 8 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B21-VF078N

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078P

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078R

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B21-VF078S

Valves in Grouping: B21-VF078A through B21-VF078S (Except I, O, and Q) (16 in Total)

CM Testing Requirements: Perform a manual stroke verifying that there is no binding or unusual movement, which would be an indication of wear. This test will provide open and closed requirements. The frequency may be extended to four valves in the group every 2R.

Condition Monitoring Justification: B33-VF013A

Valves in Grouping: B33-VF013A, B33-VF013B, B33-VF017A, & B33-VF017B

CM Testing Requirements: Perform open verification using normal operations and close leak testing at a frequency that may be extended to two valves in the group every 2R.

Condition Monitoring Justification: B33-VF013B

Valves in Grouping: B33-VF013A, B33-VF013B, B33-VF017A, & B33-VF017B

CM Testing Requirements: Perform open verification using normal operations and close leak testing at a frequency that may be extended to two valves in the group every 2R.

Condition Monitoring Justification: B33-VF017A

Valves in Grouping: B33-VF013A, B33-VF013B, B33-VF017A, & B33-VF017B

CM Testing Requirements: Perform open verification using normal operations and close leak testing at a frequency that may be extended to two valves in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 9 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: B33-VF017B

Valves in Grouping: B33-VF013A, B33-VF013B, B33-VF017A, & B33-VF017B

CM Testing Requirements: Perform open verification using normal operations and close leak testing at a frequency that may be extended to two valves in the group every 2R.

Condition Monitoring Justification: C11-VF122

Valves in Grouping: C11-VF122

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: C41-VF006

Valves in Grouping: C41-VF006 & C41-VF007

CM Testing Requirements: Perform open flow testing and close leak testing starting at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: C41-VF007

Valves in Grouping: C41-VF006 & C41-VF007

CM Testing Requirements: Perform open flow testing and close leak testing starting at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: C41-VF033A

Valves in Grouping: C41-VF033A & C41-VF033B

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: C41-VF033B

Valves in Grouping: C41-VF033A & C41-VF033B

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: CCP-V118

Valves in Grouping: CCP-V118

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: CCP-V119

Valves in Grouping: CCP-V119

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 10 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: CCP-V133

Valves in Grouping: CCP-V133

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to every 2R.

Condition Monitoring Justification: CCP-V160

Valves in Grouping: CCP-V160

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: CCP-V204

Valves in Grouping: CCP-V204 & CCP-V209

CM Testing Requirements: After performing baseline close leak testing and forward flow test, one valve in the group will be tested every 1R.

Condition Monitoring Justification: CCP-V209

Valves in Grouping: CCP-V204 & CCP-V209

CM Testing Requirements: After performing baseline close leak testing and forward flow test, one valve in the group will be tested every 1R.

Condition Monitoring Justification: CCP-V300

Valves in Grouping: CCP-V300, CCP-V83 & CCP-V92

CM Testing Requirements: Perform open verification using flow and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: CCP-V337

Valves in Grouping: CCP-V337 & CCP-V338

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: CCP-V338

Valves in Grouping: CCP-V337 & CCP-V338

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: CCP-V72

Valves in Grouping: CCP-V72 & CCP-V73

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to one valve in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 11 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: CCP-V73

Valves in Grouping: CCP-V72 & CCP-V73

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: CCP-V83

Valves in Grouping: CCP-V300, CCP-V83 & CCP-V92

CM Testing Requirements: Perform open verification using flow and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: CCP-V92

Valves in Grouping: CCP-V300, CCP-V83 & CCP-V92

CM Testing Requirements: Perform open verification using flow and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: CNS-V86

Valves in Grouping: CNS-V86

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: CSL-V10

Valves in Grouping: CSL-V10, E12-VF046A, E12-VF046B, & E12-VF046C

CM Testing Requirements: Perform open verification using flow and close testing using NIT starting at baseline then at a frequency of one valve in the group every 1R.

Condition Monitoring Justification: DER-V14

Valves in Grouping: DER-V14 & DER-V15

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: DER-V15

Valves in Grouping: DER-V14 & DER-V15

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: DER-V16

Valves in Grouping: DER-V16 & DER-V17

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to one valve in the group every 2R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 12 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements

Condition Monitoring Justification: DER-V17

Valves in Grouping: DER-V16 & DER-V17

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: DER-V4

Valves in Grouping: DER-V4

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: DFR-V1

Valves in Grouping: DFR-V1, DFR-V2, DFR-V3, and DFR-V4

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: DFR-V107

Valves in Grouping: DFR-V78, DFR-V87, DFR-V97, DFR-V107, DFR-V117, & DFR-V127

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to six years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V108

Valves in Grouping: DFR-V79, DFR-V88, DFR-V98, DFR-V108, DFR-V118, & DFR-V128

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to four years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V117

Valves in Grouping: DFR-V78, DFR-V87, DFR-V97, DFR-V107, DFR-V117, & DFR-V127

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to six years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V118

Valves in Grouping: DFR-V79, DFR-V88, DFR-V98, DFR-V108, DFR-V118, & DFR-V128

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to four years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V127

Valves in Grouping: DFR-V78, DFR-V87, DFR-V97, DFR-V107, DFR-V117, & DFR-V127

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to six years for each valve in the group on a staggered basis.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 13 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: DFR-V128

Valves in Grouping: DFR-V79, DFR-V88, DFR-V98, DFR-V108, DFR-V118, & DFR-V128

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to four years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V180

Valves in Grouping: DFR-V180

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: DFR-V2

Valves in Grouping: DFR-V1, DFR-V2, DFR-V3, and DFR-V4

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: DFR-V3

Valves in Grouping: DFR-V1, DFR-V2, DFR-V3, and DFR-V4

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: DFR-V4

Valves in Grouping: DFR-V1, DFR-V2, DFR-V3, and DFR-V4

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: DFR-V78

Valves in Grouping: DFR-V78, DFR-V87, DFR-V97, DFR-V107, DFR-V117, & DFR-V127

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to six years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V79

Valves in Grouping: DFR-V79, DFR-V88, DFR-V98, DFR-V108, DFR-V118, & DFR-V128

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to four years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V87

Valves in Grouping: DFR-V78, DFR-V87, DFR-V97, DFR-V107, DFR-V117, & DFR-V127

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to six years for each valve in the group on a staggered basis.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 14 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: DFR-V88

Valves in Grouping: DFR-V79, DFR-V88, DFR-V98, DFR-V108, DFR-V118, & DFR-V128

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to four years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V97

Valves in Grouping: DFR-V78, DFR-V87, DFR-V97, DFR-V107, DFR-V117, & DFR-V127

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to six years for each valve in the group on a staggered basis.

Condition Monitoring Justification: DFR-V98

Valves in Grouping: DFR-V79, DFR-V88, DFR-V98, DFR-V108, DFR-V118, & DFR-V128

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to four years for each valve in the group on a staggered basis.

Condition Monitoring Justification: E12-VF046A

Valves in Grouping: CSL-V10, E12-VF046A, E12-VF046B, & E12-VF046C

CM Testing Requirements: Perform open flow and closed test starting at baseline then at a frequency of one valve in the group every 1R.

Condition Monitoring Justification: E12-VF046B

Valves in Grouping: CSL-V10, E12-VF046A, E12-VF046B, & E12-VF046C

CM Testing Requirements: Perform open flow and closed test starting at baseline then at a frequency of one valve in the group every 1R.

Condition Monitoring Justification: E12-VF046C

Valves in Grouping: CSL-V10, E12-VF046A, E12-VF046B, & E12-VF046C

CM Testing Requirements: Perform open flow and closed test starting at baseline then at a frequency of one valve in the group every 1R.

Condition Monitoring Justification: E12-VF050A

Valves in Grouping: E12-VF050A & E12-VF050B

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: E12-VF050B

Valves in Grouping: E12-VF050A & E12-VF050B

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to one valve in the group every 3R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 15 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: E22-VF002

Valves in Grouping: E22-VF002

CM Testing Requirements: Perform open flow testing and closed leak testing that may be extended to every 3 cycles.

Condition Monitoring Justification: E22-VF016

Valves in Grouping: E22-VF016

CM Testing Requirements: Perform open verification using flow and close leak test starting at baseline then at a frequency that may be extended to every 1R.

Condition Monitoring Justification: E33-VF004

Valves in Grouping: E33-VF024 & E33-VF004

CM Testing Requirements: Perform forward flow and leak test starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: E33-VF024

Valves in Grouping: E33-VF024 & E33-VF004

CM Testing Requirements: Perform forward flow and leak test starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: E51-VF030

Valves in Grouping: E51-VF030

CM Testing Requirements: Perform disassembly and inspection at a frequency that may be extended to every 3R.

Condition Monitoring Justification: E51-VF040

Valves in Grouping: E51-VF040

CM Testing Requirements: Due to condition found in RF-17 per CR-RBS-2013-1968, perform disassembly and inspection at a frequency that may be extended to every 1R.

Condition Monitoring Justification: E51-VF061

Valves in Grouping: E51-VF061

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to every 2R.

Condition Monitoring Justification: E51-VF079

Valves in Grouping: E51-VF079 & E51-VF081

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to one valve in the group every 3R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 16 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: E51-VF081

Valves in Grouping: E51-VF079 & E51-VF081

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: EGA-V147

Valves in Grouping: EGA-V147, EGA-V148, EGA-V151, & EGA-V152

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: EGA-V148

Valves in Grouping: EGA-V147, EGA-V148, EGA-V151, & EGA-V152

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: EGA-V151

Valves in Grouping: EGA-V147, EGA-V148, EGA-V151, & EGA-V152

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: EGA-V152

Valves in Grouping: EGA-V147, EGA-V148, EGA-V151, & EGA-V152

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: EGF-V3

Valves in Grouping: EGF-V3, EGF-V33, & EGF-V63

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: EGF-V33

Valves in Grouping: EGF-V3, EGF-V33, & EGF-V63

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 17 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: EGF-V63

Valves in Grouping: EGF-V3, EGF-V33, & EGF-V63

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: FPW-V263

Valves in Grouping: FPW-V263

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: G33-VF051

Valves in Grouping: G33-VF051

CM Testing Requirements: Perform open flow testing and close leak testing or NIT at a frequency that may be extended to every 3R.

Condition Monitoring Justification: G33-VF052A

Valves in Grouping: G33-VF052A & G33-VF052B

CM Testing Requirements: Perform open flow verification testing and close leak testing or NIT starting at baseline (used to confirm past open flow conditions) then at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: G33-VF052B

Valves in Grouping: G33-VF052A & G33-VF052B

CM Testing Requirements: Perform open flow verification testing and close leak testing or NIT starting at baseline (used to confirm past open flow conditions) then at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: HVK-V33

Valves in Grouping: HVK-V33, HVK-V34, HVK-V82 & HVK-V83

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: HVK-V34

Valves in Grouping: HVK-V33, HVK-V34, HVK-V82 & HVK-V83

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 18 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: HVK-V48

Valves in Grouping: HVK-V48 & HVK-V97

CM Testing Requirements: Due to failure of HVK-V97 on 8/13/12, perform disassembly and inspection at a frequency of one valve in the group every 1R (Ref. LO-WTRBS-2011-00192, CA-0100).

Condition Monitoring Justification: HVK-V49

Valves in Grouping: HVK-V98 & HVK-V49

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: HVK-V82

Valves in Grouping: HVK-V33, HVK-V34, HVK-V82 & HVK-V83

CM Testing Requirements: Perform open flow verification using normal operations and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: HVK-V83

Valves in Grouping: HVK-V33, HVK-V34, HVK-V82 & HVK-V83

CM Testing Requirements: Perform open flow verification using normal operations and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: HVK-V97

Valves in Grouping: HVK-V97 & HVK-V48

CM Testing Requirements: Due to failure of HVK-V97 on 8/13/12, perform disassembly and inspection at a frequency of one valve in the group every 1R (Ref. LO-WTRBS-2011-00192, CA-0100).

Condition Monitoring Justification: HVK-V98

Valves in Grouping: HVK-V49 & HVK-V98

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: HVN-V1316

Valves in Grouping: HVN-V1316

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 19 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: HVN-V541

Valves in Grouping: HVN-V541

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: HVN-V544

Valves in Grouping: HVN-V544 & HVN-V545

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: HVN-V545

Valves in Grouping: HVN-V544 & HVN-V545

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: HVN-V546

Valves in Grouping: HVN-V546 & HVN-V547

CM Testing Requirements: Perform forward flow and leak or NIT testing starting at baseline that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: HVN-V547

Valves in Grouping: HVN-V546 & HVN-V547

CM Testing Requirements: Perform forward flow and leak or NIT testing starting at baseline that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: IAS-V3095

Valves in Grouping: IAS-V3095, IAS-V3096, IAS-V3097 & IAS-V3098

CM Testing Requirements: Perform open verification using flow and close leak test starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: IAS-V3096

Valves in Grouping: IAS-V3095, IAS-V3096, IAS-V3097 & IAS-V3098

CM Testing Requirements: Perform open verification using flow and close leak test starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: IAS-V3097

Valves in Grouping: IAS-V3095, IAS-V3096, IAS-V3097 & IAS-V3098

CM Testing Requirements: Perform open verification using flow and close leak test starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 20 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: IAS-V3098

Valves in Grouping: IAS-V3095, IAS-V3096, IAS-V3097 & IAS-V3098

CM Testing Requirements: Perform open verification using flow and close leak test starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: IAS-V514

Valves in Grouping: IAS-V514 & IAS-V515

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: IAS-V515

Valves in Grouping: IAS-V514 & IAS-V515

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: IAS-V78

Valves in Grouping: IAS-V78

CM Testing Requirements: Perform disassembly inspection at a frequency that may be extended to every 3R.

Condition Monitoring Justification: IAS-V80

Valves in Grouping: IAS-V80

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: ICS-V21

Valves in Grouping: ICS-V21

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT at a frequency that may be extended to every 2R. (Ref. LO-WTRBS-2011-00192, CA-0086).

Condition Monitoring Justification: ICS-V3004

Valves in Grouping: ICS-V3004

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to every 2R.

Condition Monitoring Justification: LSV-V112

Valves in Grouping: LSV-V112 & LSV-V118

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to one valve in the group every 3R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 21 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: LSV-V118

Valves in Grouping: LSV-V112 & LSV-V118

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency that may be extended to one valve in the group every 3R.

Condition Monitoring Justification: SAS-V486

Valves in Grouping: SAS-V486

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: SFC-V101

Valves in Grouping: SFC-V101

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: SFC-V350

Valves in Grouping: SFC-V350

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: SFC-V351

Valves in Grouping: SFC-V351

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: SFC-V39

Valves in Grouping: SFC-V39 & SFC-V40

CM Testing Requirements: Perform open flow verification and close leak testing starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SFC-V40

Valves in Grouping: SFC-V39 & SFC-V40

CM Testing Requirements: Perform open flow verification and close leak testing starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SFC-V59

Valves in Grouping: SFC-V59, SFC-V60, SFC-V61, & SFC-V62

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT or leak test starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 22 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: SFC-V60

Valves in Grouping: SFC-V59, SFC-V60, SFC-V61, & SFC-V62

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT or leak test starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SFC-V61

Valves in Grouping: SFC-V59, SFC-V60, SFC-V61, & SFC-V62

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT or leak test starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SFC-V62

Valves in Grouping: SFC-V59, SFC-V60, SFC-V61, & SFC-V62

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT or leak test starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SSR-V706

Valves in Grouping: SSR-V706

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Category A leak test.

Condition Monitoring Justification: SVV-V121

Valves in Grouping: SVV-V121 & SVV-128

CM Testing Requirements: Perform open verification using open flow test and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SVV-V122

Valves in Grouping: SVV-V122, SVV-V123, SVV-V129 & SVV-V130

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT at a frequency that may be extended to two valves in the group every 3R.

Condition Monitoring Justification: SVV-V123

Valves in Grouping: SVV-V122, SVV-V123, SVV-V129 & SVV-V130

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT at a frequency that may be extended to two valves in the group every 3R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 23 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: SVV-V128

Valves in Grouping: SVV-V121 & SVV-128

CM Testing Requirements: Perform open verification using open flow test and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SVV-V129

Valves in Grouping: SVV-V122, SVV-V123, SVV-V129 & SVV-V130

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT at a frequency that may be extended to two valves in the group every 3R.

Condition Monitoring Justification: SVV-V130

Valves in Grouping: SVV-V122, SVV-V123, SVV-V129 & SVV-V130

CM Testing Requirements: Perform open verification using normal operations and close testing using NIT at a frequency that may be extended to two valves in the group every 3R.

Condition Monitoring Justification: SVV-V31

Valves in Grouping: SVV-V31

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: SVV-V9

Valves in Grouping: SVV-V9

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: SWP-V1086

Valves in Grouping: SWP-V1086 & SWP-V1087

CM Testing Requirements: Perform open flow test and leak testing at a frequency that may be extended to one valve in the group every 2 cycles.

Condition Monitoring Justification: SWP-V1087

Valves in Grouping: SWP-V1086 & SWP-V1087

CM Testing Requirements: Perform open flow test and leak testing at a frequency that may be extended to one valve in the group every 2 cycles.

Condition Monitoring Justification: SWP-V1091

Valves in Grouping: SWP-V1091, SWP-V1092, SWP-V1095, & SWP-V1098

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency starting at baseline then it may be extended to one valve in the group every cycle.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 24 OF 28
----------------------------	---

CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: SWP-V1092

Valves in Grouping: SWP-V1091, SWP-V1092, SWP-V1095, & SWP-V1098

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency starting at baseline then it may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SWP-V1095

Valves in Grouping: SWP-V1091, SWP-V1092, SWP-V1095, & SWP-V1098

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency starting at baseline then it may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SWP-V1098

Valves in Grouping: SWP-V1091, SWP-V1092, SWP-V1095, & SWP-V1098

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency starting at baseline then it may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SWP-V1102

Valves in Grouping: SWP-V1102 & SWP-V1103

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency starting at baseline then it may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SWP-V1103

Valves in Grouping: SWP-V1102 & SWP-V1103

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency starting at baseline then it may be extended to one valve in the group every cycle.

Condition Monitoring Justification: SWP-V1224

Valves in Grouping: SWP-V1224, SWP-V1225, SWP-V1226, & SWP-V1227

CM Testing Requirements: Perform disassembly at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V1225

Valves in Grouping: SWP-V1224, SWP-V1225, SWP-V1226, & SWP-V1227

CM Testing Requirements: Perform disassembly at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V1226

Valves in Grouping: SWP-V1224, SWP-V1225, SWP-V1226, & SWP-V1227

CM Testing Requirements: Perform disassembly at baseline then at a frequency that may be extended to one valve in the group every 1R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 25 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: SWP-V1227

Valves in Grouping: SWP-V1224, SWP-V1225, SWP-V1226, & SWP-V1227

CM Testing Requirements: Perform disassembly at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V135

Valves in Grouping: SWP-V135, SWP-V136, SWP-V143, & SWP-V144

CM Testing Requirements: Perform open flow testing and closed NIT at a frequency that may be extended to one valve in the group every 2 cycles.

Condition Monitoring Justification: SWP-V136

Valves in Grouping: SWP-V135, SWP-V136, SWP-V143, & SWP-V144

CM Testing Requirements: Perform open flow testing and closed NIT at a frequency that may be extended to one valve in the group every 2 cycles.

Condition Monitoring Justification: SWP-V143

Valves in Grouping: SWP-V135, SWP-V136, SWP-V143, & SWP-V144

CM Testing Requirements: Perform open flow testing and closed NIT at a frequency that may be extended to one valve in the group every 2 cycles.

Condition Monitoring Justification: SWP-V144

Valves in Grouping: SWP-V135, SWP-V136, SWP-V143, & SWP-V144

CM Testing Requirements: Perform open flow testing and closed NIT at a frequency that may be extended to one valve in the group every 2 cycles.

Condition Monitoring Justification: SWP-V153

Valves in Grouping: SWP-V153, SWP-V154, SWP-V155, & SWP-V156

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V154

Valves in Grouping: SWP-V153, SWP-V154, SWP-V155, & SWP-V156

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V155

Valves in Grouping: SWP-V153, SWP-V154, SWP-V155, & SWP-V156

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 26 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: SWP-V156

Valves in Grouping: SWP-V153, SWP-V154, SWP-V155, & SWP-V156

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V172

Valves in Grouping: SWP-V172 & SWP-V173

CM Testing Requirements: Perform open flow testing and operational leak testing starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V173

Valves in Grouping: SWP-V172 & SWP-V173

CM Testing Requirements: Perform open flow testing and operational leak testing starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V174

Valves in Grouping: SWP-V174

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: SWP-V175

Valves in Grouping: SWP-V175

CM Testing Requirements: Perform open flow testing and closed leak testing at a frequency aligned with the Appendix J testing.

Condition Monitoring Justification: SWP-V201

Valves in Grouping: SWP-V201 & SWP-V202

CM Testing Requirements: Perform open flow test and close leakage test starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V202

Valves in Grouping: SWP-V201 & SWP-V202

CM Testing Requirements: Perform open flow test and close leakage test starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V203

Valves in Grouping: SWP-V203 & SWP-V204

CM Testing Requirements: Perform open verification using forward flow test and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 27 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: SWP-V204

Valves in Grouping: SWP-V203 & SWP-V204

CM Testing Requirements: Perform open verification using forward flow test and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V326

Valves in Grouping: SWP-V326 & SWP-V327

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: SWP-V327

Valves in Grouping: SWP-V326 & SWP-V327

CM Testing Requirements: Perform open flow testing and close leak testing at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: SWP-V437

Valves in Grouping: SWP-V437 & SWP-V516

CM Testing Requirements: Perform open flow testing and NIT at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: SWP-V516

Valves in Grouping: SWP-V437 & SWP-V516

CM Testing Requirements: Perform open flow testing and NIT at a frequency that may be extended to one valve in the group every 2R.

Condition Monitoring Justification: SWP-V77

Valves in Grouping: SWP-V77, SWP-V78, SWP-V79, & SWP-V80

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V78

Valves in Grouping: SWP-V77, SWP-V78, SWP-V79, & SWP-V80

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

Condition Monitoring Justification: SWP-V79

Valves in Grouping: SWP-V77, SWP-V78, SWP-V79, & SWP-V80

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.

RBS IST PLAN CMJ REPORT	PROGRAM SECTION NO.: SEP-RBS-IST-2 REVISION NO. 9 PAGE 28 OF 28
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CONDITION MONITORING JUSTIFICATIONS (CMJ)

NOTE: SEP-RBS-IST-1 provides the data collected, and the Advisory Panel review, that supports the following testing requirements.

Condition Monitoring Justification: SWP-V80

Valves in Grouping: SWP-V77, SWP-V78, SWP-V79, & SWP-V80

CM Testing Requirements: Perform open flow verification and close testing using NIT starting at baseline then at a frequency that may be extended to one valve in the group every 1R.