Technical Position TP-06
Position Indication Testing of EMHV8924

Purpose

The purpose of this Technical Position is to document the method used for verification of remote position indication (ISTC-3700) of EMHV8924.

Applicability

This Technical Position is applicable to valve EMHV8924, RHR HX "A" TO SI PUMPS SUCTION UPSTRM ISOL VLV

Background

This normally open motor operated valve must remain open to provide a flow path from the RHR pump discharge piping to the safety injection pumps and charging pumps suction during cold and hot leg recirculation modes of ECCS [FSAR 6.3.2]. This valve does not receive any automatic signals and is maintained in the open position. Per FSAR Table 6.3-3, the breaker is locked in the off position and the handwheel is also locked to prevent inadvertent operation. This valve is not required to change position to perform a safety function and is therefore considered passive in the open direction [ISTC-2000].

This valve is normally open and is closed only to facilitate maintenance and testing during shutdown periods. The high head suction crossover valves EMHV8807A/B are maintained closed and provide isolation capabilities during the injection mode of ECCS. Closure of this valve is not required for safe shutdown or accident mitigation. [FSAR 6.3.2]

Position

Valves EMHV8807A/B both isolate the applicable piping and are remotely opened by Operators in the unlikely event that this alternate lineup for Charging Pump suction is needed. Those valves are treated as active in the IST Program and fully tested.
Valve EMHV8924 has no active function and is only used for maintenance or testing isolation during shutdown periods. It is administratively controlled in the open position, and is essentially treated like a manual valve. A closure stroke of this valve for the sole purpose of position indication testing is not warranted. Position indication verification per ISTC-3700 will utilize a local verification of the valve in its locked open position concurrent with observation of control room indication.

Technical Position TP-07
Method for Establishing Acceptance Criteria for Power Operated Valves

Purpose

The purpose of this Technical Position is to establish the station position for establishing the stroke time acceptance criteria for power operated valves, including the Maximum/Limiting Stroke time.

Applicability

All Power Operated Valves requiring stroke time testing

Background

The IST Program requires that a valves' stroke time reference value be established in accordance with ASME OM Code 2004 through 2006 Addenda section ISTC-3300. In accordance with the definition in ISTA-2000, reference values are defined as follows:

> "one or more values of test parameters as measured or determined when the equipment is known to be operating acceptably."

Acceptable ranges (identified in Callaway test procedures as "Normal Stroke Time" Limits) are then determined based on these reference values in accordance with:
ISTC-5114 for Power Operated Valves
ISTC-5122 for Motor Operated Valves
ISTC-5132 for Pneumatically Operated Valves
ISTC-5142 for Hydraulically Operated Valves
ISTC-5152 for Solenoid Operated Valves

In accordance with the valve stroke testing requirements for the various operator types as described in ISTC-5113, 5121, 5131, 5141 and 5151, the maximum/limiting value(s) of full-stroke time of each valve shall be specified by the Owner. Subsection ISTC does not provide specific guidance on determining the limiting value(s). In accordance with NRC Generic Letter 89-04, "Guidance on Developing Acceptable Inservice Testing Programs"

> "the limiting value should be a reasonable deviation from this reference stroke time based on the valve size, valve type, and actuator type. The deviation should not be so restrictive that it results in a valve being declared inoperable due to reasonable stroke time variations. However, the deviation used to establish the limit should be such that corrective action would be taken for a valve that may not perform its intended function. When the calculated limiting value for a full-stroke is greater than a Technical Specification (TS) or safety analysis limit, the TS or safety analysis limit should be used as the limiting value of full-stroke time."

Technical Position TP-07
(Continued)
Method for Establishing Acceptance Criteria for Power Operated Valves

Position

Callaway Energy Center will use Table TP-07-1 to establish the Acceptable Ranges and Maximum/Limiting Stroke Times in accordance with ISTC-5113/5114 for Power Operated Relief Valves, ISTC-5121/5122 for Motor Operated Valves, ISTC-5131/5132 for Pneumatically Operated Valves, ISTC-5141/5142 for Hydraulically Operated Valves, and ISTC-5151/5152 for Solenoid Operated Valves. Establishment of Acceptable Ranges and Maximum/Limiting Value(s) will be as follows:

- T Ref is the reference stroke time value in seconds of a valve when it is known to be operating acceptably

- Reference values may be rounded off to the nearest tenth of a second. Acceptable Ranges may be rounded off to the nearest tenth of a second. Calculated IST Limiting Values may be rounded off to the nearest whole number. Standard rounding or conservative rounding techniques are both allowed.

- The most conservative maximum/limiting value between the IST calculated limit (as determined from Table TP-07-1), UFSAR limit, Technical Specification, or design drawing/specification limit should be used as the Maximum/Limiting stroke time. Any deviations from these criteria will be evaluated.

When a valve or its control system has been replaced, repaired, or has undergone maintenance[1] that could affect the valve's performance, a new reference value shall be determined or the previous value reconfirmed by an inservice test run before it is returned to service or immediately if not removed from service.

Table TP-07-1

Valve Operator	Reference Stroke Time	Acceptable Range	Limiting Stroke Time
Motor[2]	$T_{Ref} > 10.0$	$0.85T_{Ref}$ - $1.15T_{Ref}$	$\leq 2.0T_{Ref}$
Motor	$T_{Ref} \leq 10.0$	$0.75T_{Ref}$ - $1.25T_{Ref}$	$\leq 2.5T_{Ref}$
Pneumatic/Hydraulic/ Solenoid/PORV	$T_{Ref} > 10.0$	$0.75T_{Ref}$ - $1.25T_{Ref}$	$\leq 2.0T_{Ref}$
Pneumatic/Hydraulic/ Solenoid/PORV	$T_{Ref} \leq 10.0$	$0.50T_{Ref}$ - $1.50T_{Ref}$	$\leq 2.5T_{Ref}$
All (Optional)	$T_{Ref} < 2.0$	≤ 2.0	2.0

Technical Position TP-07
(Continued)
Method for Establishing Acceptance Criteria for Power Operated Valves

[1] Adjustment of stem packing, limit switches, or control system valves, and removal of the bonnet, stem assembly, actuator, obturator, or control system components are examples of maintenance that could affect valve performance.
[2] The maximum/limiting values for EJHV8701NB and BBPV8702NB are calculated as 1.5 T_{Ref}.

Justification

Establishing stroke time acceptance criteria in the manner described within this Technical Position will satisfy ASME Code requirements and help to ensure continued operability of the applicable valves.

Technical Position TP-08

Check Valve Condition Monitoring

Purpose

The purpose of the Check Valve Condition Monitoring Program (CVCM) is both to improve valve performance and to optimize testing, examination, and preventive maintenance activities in order to maintain the continued acceptable performance of a select group of check valves. The purpose of this Technical Position is to describe the content and structure of the CVCM Plans used by the Inservice Testing (IST) Program in lieu of the testing requirements specified in Sections ISTC-3510, ISTC-3520, ISTC-3530, ISTC-3550, and ISTC-5221 of the OM Code. This Technical Position also describes the process for development and maintenance of CVCM Plans. If the Condition Monitoring Program is discontinued for a valve or group of valves, the requirements of Sections ISTC-3510, ISTC-3520, ISTC-3530, ISTC-3550, and ISTC-5221 of the OM Code must be used.
The purpose of the Check Valve Condition Monitoring Program is to improve check valve performance and to optimize testing, examination, and preventive maintenance activities in order to maintain the continued acceptable performance of a select valve or group of valves.

Scope

The Callaway Energy Center Check Valve Condition Monitoring Program will be applied to individual check valves or groups of check valves which are either candidates for improved performance or candidates for optimization and monitoring for continued acceptable performance.

a. Candidates for valve performance improvement are those check valves which may exhibit one or more of the following attributes:

   i. The valve(s) exhibits an unusually high failure rate during inservice testing or operations;
   ii. The valve(s) cannot be exercised under normal operating conditions or during shutdown;
   iii. The valve(s) exhibits unusual, abnormal, or unexpected behavior during exercising or operations.

b. Candidates for performance-based optimized examination and preventive maintenance activities are those check valves with documented acceptable performance and that:

   i. Have demonstrated past acceptable performance or had their performance improved under this program;
   ii. Cannot be exercised or are not readily exercised during normal operating condition or during shutdown;
   iii. Can only be disassembled and examined; or It is decided that all of the associated activities of the valve or group will be optimized.

Technical Position TP-08
(Continued)
Check Valve Condition Monitoring

Groupings

For valves which are grouped together the following valve attributes shall be considered:

a. The intended purpose of the CVCM Plan (e.g., improve performance or optimized testing and examination activities).
b. Design characteristics, application, and service conditions.
c. Analysis of maintenance and modification history.
d. Analysis of test history and results.
e. System design shall be considered to determine potential flow instabilities, degree of disassembly, and the need for tolerance and dimensional measurements

Analysis

An analysis of the test and maintenance history shall be performed to establish the basis for specifying inservice testing, examination, and preventive maintenance activities. This analysis shall include the following:

a. Identify any common failure mode or corrective maintenance patterns.
b. Analyze these common patterns to determine their significance and to identify potential failure mechanisms:

    i. Determine if certain preventive maintenance activities would mitigate the failure or maintenance patterns;
    ii. Determine if certain condition monitoring activities are possible and effective in monitoring for these failure mechanisms;
    iii. Determine if periodic disassembly and examination would be an effective method in monitoring for these failure mechanisms.
    iv. Determine if the valve grouping is required to be changed.

Condition Monitoring Activities

Valve obturator movement during applicable test or examination activities shall be sufficient to determine the bidirectional functionality of the moving parts. A full open exercise test, or an open test to the position required to perform its intended function, is not required for this assessment.

a. Performance Improvement Activities

    i. If sufficient information is not available or the results of the analysis performed above are not conclusive, an interim period not to exceed 5 years or 2 refueling outages, whichever is less, shall be established to determine and correct the cause of

Technical Position TP-08
(Continued)
Check Valve Condition Monitoring

the performance problems or maintenance patterns. The following activities shall be performed at sufficient intervals over the interim period.

1. Identify interim tests (e.g. nonintrusive) to assess the performance of the valve of group of valves.
2. Identify interim examinations to evaluate potential degradation mechanisms.
3. Identify other types of analysis to be performed which will assess check valve condition.
4. Identify which of these activities will be performed on each valve.
5. Identify the interval of each activity.

ii. Identify attributes that will be trended. Trending and evaluation of existing data must be used as the bases to reduce or extend the time interval between tests or examinations.

iii. Complete or revise the condition monitoring test plans to document the check valve program performance improvement activities and their associated frequencies.

iv. Perform these activities at their assigned intervals until:

1. Sufficient information is obtained to permit an adequate analysis.
2. Until the end of the interim period (2 refueling outages or 5 years, whichever is less).

v. After performance, a review shall be performed for each trended attribute along with results for each activity to determine if changes to the program are required. If changes are required, the program shall be revised before the next performance of the activity.

b. Optimization of Condition Monitoring Activities

i. If sufficient information is available to assess the performance adequacy of the check valve or group, then the following activities shall be performed:

1. Identify appropriate preventive maintenance activities including the intervals that are required to maintain the continued acceptable performance of the check valve or group of check valves
2. Identify the applicable examination activities including the interval that will be used to periodically assess the condition of each check valve or group of check valves
3. Identify the applicable test activities including intervals that will be used periodically verify the acceptable performance of each check valve or group of check valves.
4. Identify which of these activities will be performed on each valve in the group.

Technical Position TP-08
(Continued)
Check Valve Condition Monitoring

5. Identify the interval of each activity. Interval extensions shall be limited to one fuel cycle per extension. Intervals shall not exceed the maximum interval shown in ASME 2004 Appendix II, Table II-4000-1(see Table below). All valves in a group sampling plan must be tested or examined again, before the interval can be extended again, or until the maximum interval would be exceeded.

Maximum Intervals For Use When Applying Interval Extensions

Group Size	Maximum Interval (years)
≥4	16
3	12
2	12
1	10

ii. Identify attributes that will be trended. Trending and evaluation of existing data must be used to reduce or extend the time interval between tests or examinations.

iii. Revise the condition monitoring plans to document the optimized condition monitoring program activities and associated intervals for each activity.

iv. Continue performance of these activities at their associated intervals.

v. Review the results of the performance of each activity to determine if changes to the optimized condition monitoring program are required. Changes to IST intervals must consider plant safety and be supported by trending and evaluating both generic and plant-specific performance data to ensure the component

Corrective Maintenance

If corrective maintenance is performed on a check valve, the analysis used to formulate the basis of the condition-monitoring activities for that valve and its associated valve group shall be reviewed to determine if any changes are required.

Documentation

The condition monitoring program shall be documented in IST Manager or equivalent forms and shall contain as a minimum the following information:

a. The list of valves in each group including the group basis.
b. Date the valve or group of valves was evaluated for inclusion or exclusion from the condition monitoring program.
c. Safety function(s) of valve or valve group.
d. Analysis/justification which forms the basis for the program.
e. Identification of the failure or maintenance patterns for each valve.
f. Condition monitoring activities including the trended attributes and the bases for the associated intervals for each valve or valve group.

Technical Position TP-09

Check Valves in Regular Use

Purpose

The purpose of this Technical Position is to establish the station position for check valves that are in regular use during normal plant operations.

Applicability

This Technical Position is applicable to the following check valves which are demonstrated to be open during routine operations. No additional open exercise testing is required.

Valve	Description	Safety Class
AEV0120	SG FW SPLY CHECK	2
AEV0121	SG FW SPLY CHECK	2
AEV0122	SG FW SPLY CHECK	2
AEV0123	SG FW SPLY CHECK	2
BBV0118	RCP SEAL WTR SPLY ISO CHECK	2
BBV0120	RCP SEAL WTR SPLY ISO CHECK	1
BBV0121	RCP SEAL WTR SPLY ISO CHECK	1
BBV0148	RCP SEAL WTR SPLY ISO CHECK	2
BBV0150	RCP SEAL WTR SPLY ISO CHECK	1
BBV0151	RCP SEAL WTR SPLY ISO CHECK	1
BBV0178	RCP SEAL WTR SPLY ISO CHECK	2
BBV0180	RCP SEAL WTR SPLY ISO CHECK	1
BBV0181	RCP SEAL WTR SPLY ISO CHECK	1
BBV0208	RCP SEAL WTR SPLY ISO CHECK	2
BBV0210	RCP SEAL WTR SPLY ISO CHECK	1
BBV0211	RCP SEAL WTR SPLY ISO CHECK	1
BG8440	VCT TO NCP/CCP HDR CHECK	2
EGV0447	CCW TO RW RETURN HEADER CHK VLV	1
KAV0204	RX BLD INST AIR SPLY CHECK	2

Background

The ASME OM Code 2004 through 2006 Addenda section ISTC-3550, "Valves in Regular Use", states:

"Valves that operate in the course of plant operation at a frequency that would satisfy the exercising requirements of this Subsection need not be additionally exercised, provided that the

Technical Position TP-09
(Continued)
Check Valves in Regular Use

observations otherwise required for testing are made and analyzed during such operation and recorded in the plant record at intervals no greater than specified in ISTC-3510."

Section ISTC-3510 requires that check valves shall be exercised nominally every 3 months with exceptions (for extended periods) referenced.

Normal or expected system flow may vary with plant configuration and alignment; however, the open "safety function" of a check valve typically requires a specified design accident flow rate. For the subject valves, the normal system flow is above the design accident flow rates. Since Callaway Plant Operations staff is trained in recognizing normal plant conditions, Operator judgment is acceptable in determining satisfactory check valve open function by obtaining normal or expected flow rates for the plant operating condition.

In summary, check valve open functions are satisfactorily demonstrated by verifying normal or expected flow as applicable.

Position

Callaway Energy Center will verify the open position of these subject check valves by observing plant logs, computer systems, strip chart records, etc. during normal plant operations. The open/closed safety function shall be recorded at a frequency required by ISTC-3510, nominally every 3 months, with exceptions as provided, in plant records such as Callaway Nuclear Plant Operating Logs, Electronic Rounds, chart recorders, automated data loggers, etc.

Justification

The plant systems and operator actions provide for the observations and analysis that these valves are satisfying their open safety function. Additionally, the recording of parameters which demonstrate valve position is satisfied at a frequency in accordance with ISTC-3510. These actions collectively demonstrate the open safety function of Inservice Testing Program check valves in regular use as required by ISTC-3550.

Technical Position TP-10

Categorization of IST Pumps (Group A or B)

Purpose

To define the specific Code categorization and test parameter requirements of each pump in the Callaway IST Program scope.

Applicability

Applies to all of the pumps being tested within the Inservice Testing program.

Background

The ASME O&M Code was revised in 1995 to specify additional testing requirements for pumps. The Code established new categories for pumps which would dictate the degree of additional testing that must be done. This categorization requirement is implemented and continued in accordance with the 2004 Edition through 2006 Addenda of ASME O&M Code.

Position

Callaway Energy Center has categorized the pumps required to be included in the Inservice Testing Program as either Group A or B in accordance with the requirements of ISTB-1300 and ISTB-2000.
Group A categorization applies to pumps that are operated continuously or routinely during normal operation, cold shutdown, or refueling operations. The following pumps are categorized as Group A at Callaway Plant:

Pump Number	Class	Group	Type	Function
PBG02A	3	A	Centrifugal	Boric Acid Transfer
PBG02B	3	A	Centrifugal	Boric Acid Transfer
PEG01A	3	A	Centrifugal	Component Cooling
PEG01B	3	A	Centrifugal	Component Cooling
PEG01C	3	A	Centrifugal	Component Cooling
PEG01D	3	A	Centrifugal	Component Cooling
PEJ01A	2	A	Centrifugal	Residual Heat Removal
PEJ01B	2	A	Centrifugal	Residual Heat Removal
PAL01A	3	A	Centrifugal	Auxiliary Feedwater
PAL01B	3	A	Centrifugal	Auxiliary Feedwater
PEF01A	3	A	Vertical	Essential Service Water
PEF01B	3	A	Vertical	Essential Service Water

Technical Position TP-10
(Continued)
Categorization of IST Pumps (Group A or B)

Group B categorization applies to those pumps in standby systems that are not operated routinely except for testing. The following pumps are categorized as Group B at Callaway Plant:

Pump Number	Class	Group	Type	Function
PAL02	3	B	Centrifugal	Auxiliary Feedwater
PBG05A	2	B	Centrifugal	Charging
PBG05B	2	B	Centrifugal	Charging
PEC01A(1)	3	B	Centrifugal	Spent Fuel Cooling
PEC01B(1)	3	B	Centrifugal	Spent Fuel Cooling
PEM0lA	2	B	Centrifugal	Safety Injection
PEM0lB	2	B	Centrifugal	Safety Injection
PEN0lA	2	B	Centrifugal	Containment Spray
PEN0lB	2	B	Centrifugal	Containment Spray

(1) Augmented Components

Group A Pump Tests - Group A tests are performed quarterly for each pump categorized as A. The following inservice test parameters are measured for each Group A pump test (unless specific relief has been granted):

- Speed (if pump is variable speed)
- Differential Pressure
- Discharge Pressure, (for positive displacement pumps)
- Flow Rate
- Vibration

Group B Pump Tests - Group B tests are performed quarterly for each pump categorized as B. The following inservice test parameters are measured for each Group B pump test (unless specific relief has been granted):

- Speed (if pump is variable speed)
- Differential Pressure(2)
- Flow Rate(2)

(2) For positive displacement pumps, flow rate shall be measured or determined. For all other pumps, differential pressure or flow rate shall be measured or determined.

Technical Position TP-10
(Continued)
Categorization of IST Pumps (Group A or B)

Comprehensive Pump Tests - Comprehensive pump tests are performed biennially for all pumps in the Inservice Testing Program. The following inservice test parameters are measured for each Comprehensive pump test (unless specific relief has been granted):

- Speed (if pump is variable speed)
- Differential Pressure
- Discharge Pressure, (for positive displacement pumps)
- Flow Rate
- Vibration

The following instrument accuracy requirements apply to each test type:

Parameter	Group A	Group B	Comprehensive
Pressure	+/- 2.0%	+/- 2.0%	+/- 0.5%
Flow Rate	+/- 2.0%	+/- 2.0%	+/- 2.0%
Speed	+/- 2.0%	+/- 2.0%	+/- 2.0%
Vibration	+/- 5.0%	+/- 5.0%	+/- 5.0%
Differential Pressure	+/- 2.0%	+/- 2.0%	+/- 0.5%

Technical Position TP-11
Non-Intrusive Check Valve Testing

Purpose

The purpose of this Technical Position is to document the acceptability of check valve non-intrusive testing (NIT).

Applicability

This Technical Position is applicable to the following check valves:

Valves	Non-intrusive test (direction)
BB8378A,B	Close
BB8379A,B	Close
BB8948A,B,C,D	Open
BB8949B,C	Open
BBV0001,22,40,59	Open
BBV0120,121	Close
BBV0150,151	Close
BBV0180,181	Close
BBV0210,211	Close
BGV0174	Close
EJ8841A,B	Open
EP8818A,B,C,D	Open
EP8956A,B,C,D	Open

Background

The NRC previously determined that NIT methods appropriate for certain valve applications are acceptable to verify the capability of the valve to open, close, and fully stroke, provided that the licensee properly qualifies the testing methods used for the valve application in accordance with the plant's quality assurance program requirements. Position 1 of Generic Letter 89-04 lists the six criteria to be addressed and documented in the IST Program for the qualification of NIT. This Technical Position will address these six criteria.

Position

- Criterion 1: Impracticality of performing a full-flow test

Callaway currently has several configurations where total flow to multiple leg injection lines, containing the subject check valves which require full open stroke testing, is measured. However, the individual leg flowrates are not measured because the individual lines do not have

Technical Position TP-11
(Continued)
Non-Intrusive Check Valve Testing

permanently installed flow measuring instrumentation. So, while a full flow test is possible, measuring the flowrate in each individual injection line is impractical.

- Criterion 2: A description of the alternative technique used and a summary of the procedures being followed.
- Criterion 3: A description of the instrumentation used and the maintenance and calibration of the instrumentation.

NIT at Callaway involved the use of Liberty Technology "QuickCheck" system (up to RF10) and is currently using the Crane Nuclear "Viper" system. The Liberty QuickCheck system used accelerometers and a portable data acquisition unit, which had data analysis software, to collect and analyze test signatures. The Crane Viper system uses accelerometers, eddy current probes, and sound card technologies with a portable data acquisition unit to collect and analyze test signatures. In addition, other supporting test equipment used are accelerometer/eddy current mounting studs, adhesive, cables, and equipment to measure the accelerometer/eddy current probe locations.

The Liberty QuickCheck data acquisition equipment - accelerometers and data acquisition unit - was calibrated every 18 months. The Crane Viper data acquisition equipment - accelerometers, pre-amps, and data acquisition unit - is calibrated annually based on vendor recommendations. Cables are inspected before every refueling outage.

Callaway administrative procedures being followed for NIT testing are EDP-ZZ-01122, Check Valve Predictive Performance Manual and ETP-ZZ-01331, Crane Nuclear Diagnostic System for Testing Check Valves. In addition, the IST Program lists the applicable operations surveillance procedures (OSP) that test the subject check valves.

- Criterion 4: A description of the method and results of the program to qualify the alternative technique for meeting the ASME Code.

- Criterion 5: A description of the basis used to verify that the baseline data has been generated when the valve is known to be in good working order, such as recent inspection and maintenance of the valve internals (components).

The generic qualification of non-intrusive testing was done under the Nuclear Industry Check Valve Group (NIC) Phase 1 through 3 reports and the Check Valve Nonintrusive Analysis Guide, also prepared by NIC. Callaway's non-intrusive check valve testing is performed by trained and qualified personnel in data acquisition and analysis.

Several of the check valves listed in this Technical Position are also included in the Callaway Check Valve Condition Monitoring Program. The Condition Monitoring Program contains information on the valve grouping, valve grouping basis, and system flow condition tolerances.

Technical Position TP-11
(Continued)
Non-Intrusive Check Valve Testing

- Criterion 6: A description of the basis for the acceptance criteria for the alternative testing and a description of corrective actions to be taken if the acceptance criteria are not met.

Trained and qualified Callaway personnel continually evaluate the quality of the NIT test signatures to verify the quality of the test data and condition of the valve. The Corrective Action Program is used to address and document deficiencies in the quality of the test data or adverse test data trends.
The Condition Monitoring Program documents these reviews and based on the evaluated results may require changes to the Condition Monitoring Program.

In general, Callaway used disassembly and inspection and/or seat leakage testing to verify a check valve was known to be in good working order before NIT began. Callaway did identify NIT baseline deficiencies during a review of NRC IN 2000-21 (CAR 200003220). Deficiencies were corrected under CAR 200301844. The Corrective Action Program is used to address and document any deficiencies identified during inspection and maintenance activities. The Condition Monitoring Program documents these reviews of recent inspection and maintenance work and based on these evaluated results may require changes to the Condition Monitoring Program.

References

1. GL 89-04, Guidance on Developing Acceptable Inservice Testing Program
2. NUREG 1482, Revision 1
3. NRC Information Notice (IN) 2000-21, Detached Check Valve Disc Not Detected by Use of Acoustic and Magnetic Nonintrusive test techniques

Technical Position TP-13

Test Frequency for Class 3 Vacuum Relief Valves, EGV0305 and EGV0306

Purpose

The purpose of this Technical Position is to establish the station position for the test frequency of Class 3 vacuum relief valves, EGV0305 and EGV0306.

Applicability

This Technical Position is applicable to the Component Cooling Water (CCW) Surge Tank Vacuum Relief valves, EGV0305 and EGV0306.

Background

EGV0305 and EGV0306 are vacuum relief valves installed to protect the CCW surge tanks from collapsing during a specific accident scenario. The surge tank vent valves would automatically close on high radiation levels in CCW due to a primary coolant inleakage to CCW. If the CCW pumps remain running there is a potential to begin drawing a vacuum in the CCW surge tanks. At a set pressure of 6 inches vacuum EGV0305 and EGV0306 open to connect the respective surge tank(s) to building atmosphere.

The test requirements for EGV0305 and EGV0306 are governed by ASME OM Code, Appendix I, Inservice Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants. Specifically, the test frequency requirement for these valves is governed by Appendix I, Paragraph I-1380, "Test Frequency, Classes 2 and 3 Vacuum Relief Valves, Except for Primary Containment Vacuum Relief Valves". This paragraph requires:

> "All Classes 2 and 3 vacuum relief valves shall be tested every 2 years, unless performance data suggest the need for a more appropriate test interval."

This test frequency requirement in Paragraph I-1380 was first introduced in the 2001 Edition of the ASME OM Code. In previous editions of the Code, the test frequency requirement for EGV0305 and EGV0306 was governed by the same requirements currently stated in Paragraph I-1350, Test Frequency, Class 2 and 3 Pressure Relief Valves. Specifically, this paragraph requires testing every 10 years. In addition, because this is a relief valve group, there is an additional requirement that 20 percent of the valve group be tested within any 48-month period.

Technical Position TP-13
(Continued)
Test Frequency for Class 3 Vacuum Relief Valves, EGV0305 and EGV0306

Position

Class 3 vacuum relief valves EGV0305 and EGV0306 will be tested every 72 months with a minimum of 20 percent of this valve group tested within any 36-month period, unless performance data suggest the need for a shorter test interval.

Justification

The wording in Paragraph I-1380 - "unless performance data suggest the need for a more appropriate test interval" - allows for a test interval that is shorter or longer than 2 years. Therefore, the test frequency requirement of Paragraph I-1380 continues to be met by testing EGV0305 and EGV0306 every 72 months with a minimum of 20 percent tested within any 36-month period.

As already stated, the test frequency for EGV0305 and EGV0306 has historically been 20 percent of the valve group tested within 48 months and 100 percent of the group tested within every 10 years. Additionally, the test results for this valve group are trended and monitored within the IST Program. The test results for this valve group during the Third Interval included some adverse findings. Based on this data, the test frequency for the Fourth Interval is being reduced to a maximum of every 72 months with exams alternating every 36 months. Trending and monitoring will continue to be performed for these valves to assess the effects of the shortened test interval. Note that the primary trend data is lift/set pressure test data. Seat leakage will be evaluated on a case-by-case basis for any effect on system performance and valve performance.

ATTACHMENT 10

PUMP TABLES

Pump Location	Safety Class	Pump Type	Pump Driver	Nominal Speed	P&ID	P&ID Coor.	Category	Test Type	Test Freq.	Relief Request	Tech. Pos.
PAL01A	3	Centrifugal	Motor	N/A	M-22AL01	D-4	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	MOTOR DRIVEN AUXILIARY FEEDWATER PUMP A									
PAL01B	3	Centrifugal	Motor	N/A	M-22AL01	H-4	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	MOTOR DRIVEN AUXILIARY FEEDWATER PUMP B									
PAL02	3	Centrifugal	Turbine	3850	M-22AL01	B-4	Group B	DPb	M3		
								DPc	Y2		
								Nb	M3		
								Nc	Y2		
								Qc	Y2	PR-06	
								Vc	Y2		
	Pump Name:	TURBINE DRIVEN AUXILIARY FEEDWATER PUMP									
PBG02A	3	Centrifugal	Motor	N/A	M-22BG-5	B-7	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-03	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	CVCS BORIC ACID TRANSFER PUMP A									
PBG02B	3	Centrifugal	Motor	N/A	M-22BG05	A-7	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-03	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	CVCS BORIC ACID TRANSFER PUMP B									

Pump Location	Safety Class	Pump Type	Pump Driver	Nominal Speed	P&ID	P&ID Coor.	Category	Test Type	Test Freq.	Relief Request	Tech. Pos.
PBG05A	2	Centrifugal	Motor	N/A	M-22BG03	B-5	Group B	DPb	M3	PR-02	
								DPc	Y2		
								Qc	Y2	PR-06	
								Vc	Y2		
	Pump Name:	CENTRIFUGAL CHARGING PUMP A									
PBG05B	2	Centrifugal	Motor	N/A	M-22BG03	C-5	Group B	DPb	M3	PR-02	
								DPc	Y2		
								Qc	Y2	PR-06	
								Vc	Y2		
	Pump Name:	CENTRIFUGAL CHARGING PUMP B									
PEC01A	3	Centrifugal	Motor	N/A	M-22EC01	H-7	Group B	DPb	RR		
								Qb	RR		
	Pump Name:	FUEL POOL COOLING PUMP "A"									
PEC01B	3	Centrifugal	Motor	N/A	M-22EC01	E-7	Group B	DPb	RR		
								Qb	RR		
	Pump Name:	FUEL POOL COOLING PUMP "B"									
PEF01A	3	Vertical Line Shaft	Motor	N/A	M-U2EF01	G-6	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	ESSENTIAL SERVICE WATER PUMP A									
PEF01B	3	Vertical Line Shaft	Motor	N/A	M-U2EF01	D-6	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	ESSENTIAL SERVICE WATER PUMP B									

Pump Location	Safety Class	Pump Type	Pump Driver	Nominal Speed	P&ID	P&ID Coor.	Category	Test Type	Test Freq.	Relief Request	Tech. Pos.
PEG01A	3	Centrifugal	Motor	N/A	M-22EG01	G-4	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	COMPONENT COOLING WATER PUMP A									
PEG01B	3	Centrifugal	Motor	N/A	M-22EG01	D-4	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	COMPONENT COOLING WATER PUMP B									
PEG01C	3	Centrifugal	Motor	N/A	M-22EG01	E-4	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	COMPONENT COOLING WATER PUMP C									
PEG01D	3	Centrifugal	Motor	N/A	M-22EG01	B-4	Group A	DPa	M3		
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	COMPONENT COOLING WATER PUMP D									
PEJ01A	2	Centrifugal	Motor	N/A	M-22EJ01	G-6	Group A	DPa	M3	PR-01	
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	RESIDUAL HEAT REMOVAL PUMP A									

Pump Location	Safety Class	Pump Type	Pump Driver	Nominal Speed	P&ID	P&ID Coor.	Category	Test Type	Test Freq.	Relief Request	Tech. Pos.
PEJ01B	2	Centrifugal	Motor	N/A	M-22EJ01	C-6	Group A	DPa	M3	PR-01	
								DPc	Y2		
								Qa	M3	PR-06	
								Qc	Y2	PR-06	
								Va	M3		
								Vc	Y2		
	Pump Name:	RESIDUAL HEAT REMOVAL PUMP B									
PEM01A	2	Centrifugal	Motor	N/A	M-22EM01	E-6	Group B	DPb	M3		
								DPc	Y2		
								Qc	Y2	PR-06	
								Vc	Y2		
	Pump Name:	SAFETY INJECTION PUMP A									
PEM01B	2	Centrifugal	Motor	N/A	M-22EM01	D-6	Group B	DPb	M3		
								DPc	Y2		
								Qc	Y2	PR-06	
								Vc	Y2		
	Pump Name:	SAFETY INJECTION PUMP B									
PEN01A	2	Centrifugal	Motor	N/A	M-22EN01	G-6	Group B	DPb	M3		
								DPc	Y2		
								Qc	Y2	PR-06	
								Vc	Y2		
	Pump Name:	CONTAINMENT SPRAY PUMP A									
PEN01B	2	Centrifugal	Motor	N/A	M-22EN01	B-6	Group B	DPb	M3		
								DPc	Y2		
								Qc	Y2	PR-06	
								Vc	Y2		
	Pump Name:	CONTAINMENT SPRAY PUMP B									
PJE01A	3	Centrifugal	Motor	N/A	M-22JE01	E-7	Skid-mounted	SK	M3		TP-05
	Pump Name:	EMERGENCY FUEL OIL TRANSFER PUMP A									
PJE01B	3	Centrifugal	Motor	N/A	M-22JE01	A-7	Skid-mounted	SK	M3		TP-05
	Pump Name:	EMERGENCY FUEL OIL TRANSFER PUMP B									
PKJ01A		Centrifugal	Motor	N/A	M-22KJ01	F-4	Skid-mounted	SK	OP		TP-05
	Pump Name:	DG A JKT WATER KEEP WARM PUMP									

Pump Location	Safety Class	Pump Type	Pump Driver	Nominal Speed	P&ID	P&ID Coor.	Category	Test Type	Test Freq.	Relief Request	Tech. Pos.
PKJ01B		Centrifugal	Motor	N/A	M-22KJ04	F-4	Skid-mounted	SK	OP		TP-05
	Pump Name:	DG B JKT WATER KEEP WARM PUMP									
PKJ03A		Positive Displacement	Motor	N/A	M-22KJ03	C-4	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG A LUBE OIL KEEP WARM PUMPS									
PKJ03B		Positive Displacement	Motor	N/A	M-22KJ06	C-4	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG B LUBE OIL KEEP WARM PUMPS									
PKJ04A		Positive Displacement	Engine	N/A	M-22KJ02	G-2	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG A ENGINE DRIVEN FUEL OIL PUMP									
PKJ04B		Positive Displacement	Engine	N/A	M-22KJ05	G-2	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG B ENGINE DRIVEN FUEL OIL PUMP									
PKJ05A		Centrifugal	Engine	N/A	M-22KJ01	C-6	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG A ENGINE DRIVEN INTERCOOLER PUMP									
PKJ05B		Centrifugal	Engine	N/A	M-22KJ04	C-6	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG B ENGINE DRIVEN INTERCOOLER PUMP									
PKJ06A		Centrifugal	Engine	N/A	M-22KJ01	E-5	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG A ENGINE DRIVEN JACKET WATER PUMP									
PKJ06B		Centrifugal	Engine	N/A	M-22KJ04	E-5	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG B ENGINE DRIVEN JACKET WATER PUMP									
PKJ07A		Positive Displacement	Engine	N/A	M-22KJ03	C-6	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG A ENGINE DRIVEN LUBE OIL PUMP									
PKJ07B		Positive Displacement	Engine	N/A	M-22KJ06	C-6	Skid-mounted	SK	M3		TP-05
	Pump Name:	DG B ENGINE DRIVEN LUBE OIL PUMP									

ATTACHMENT 11

VALVE TABLES

Main Steam (AB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ABHV0005	M-22AB02	D-4	2	B	4.0	GB	AO	Active	C	O	BTO	M3			
											FO	M3			TP-04
											PIT	Y2			
	Valve Name:	TDAFP STM SPLY FROM MS LOOP 2													
ABHV0006	M-22AB02	C-4	2	B	4.0	GB	AO	Active	C	O	BTO	M3			
											FO	M3			TP-04
											PIT	Y2			
	Valve Name:	TDAFP STM SPLY FROM MS LOOP 3													
ABHV0011	M-22AB02	G-3	2	B	28.0	GT	SA	Active	O	C	BTC	CS		CSJ-01	
											FC	CS		CSJ-01	TP-04
											PIT	Y2			
	Valve Name:	SG D MSIV													
ABHV0012	M-22AB02	G-3	2	B	2.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			
											PIT	Y2			
	Valve Name:	SG D MS LOOP 4 ABHV0011 BYP ISO HV													
ABHV0014	M-22AB02	F-3	2	B	28.0	GT	SA	Active	O	C	BTC	CS		CSJ-01	
											FC	CS		CSJ-01	TP-04
											PIT	Y2			
	Valve Name:	SG A MSIV													
ABHV0015	M-22AB02	F-3	2	B	2.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			
											PIT	Y2			
	Valve Name:	SG A MS LOOP 1 ABHV0014 BYP ISO HV													
ABHV0017	M-22AB02	D-3	2	B	28.0	GT	SA	Active	O	C	BTC	CS		CSJ-01	
											FC	CS		CSJ-01	TP-04
											PIT	Y2			
	Valve Name:	SG B MSIV													
ABHV0018	M-22AB02	D-3	2	B	2.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			
											PIT	Y2			
	Valve Name:	SG B MS LOOP 2 ABHV0017 BYP ISO HV													

Main Steam (AB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ABHV0020	M-22AB02	C-3	2	B	28.0	GT	SA	Active	O	C	BTC	CS		CSJ-01	
											FC	CS		CSJ-01	TP-04
											PIT	Y2			
	Valve Name:	SG C MSIV													
ABHV0021	M-22AB02	C-3	2	B	2.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			
											PIT	Y2			
	Valve Name:	SG C MS LOOP 3 ABHV0020 BYP ISO HV													
ABHV0048	M-22AB02	D-4	2	B	1.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	MS LOOP 2 WARMUP STM SPLY TO TDAFP ISO HV													
ABHV0049	M-22AB02	C-4	2	B	1.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	MS LOOP 3 WARMUP STM SPLY TO TDAFP ISO HV													
ABLV0007	M-22AB02	B-4	2	B	2.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	MS LOOP 3 LO PNT DRN LCV													
ABLV0008	M-22AB02	D-5	2	B	2.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	MS LOOP 2 LO PNT DRN LCV													
ABLV0009	M-22AB02	E-4	2	B	2.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	MS LOOP 1 LO PNT DRN LCV													
ABLV0010	M-22AB02	G-4	2	B	2.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	MS LOOP 4 LO PNT DRN LCV													
ABPSE0001	M-22AB02	H-3	2	D	1	RV	SA	Active	C	O	RT	Y5			
	Valve Name:	RUPTURE DISC FOR ABHV0011													

Main Steam (AB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ABPSE0002	M-22AB02	F-3	2	D	1	RV	SA	Active	C	O	RT	Y5			
	Valve Name:	RUPTURE DISC FOR ABHV0014													
ABPSE0003	M-22AB02	E-3	2	D	1	RV	SA	Active	C	O	RT	Y5			
	Valve Name:	RUPTURE DISC FOR ABHV0017													
ABPSE0004	M-22AB02	C-3	2	D	1	RV	SA	Active	C	O	RT	Y5			
	Valve Name:	RUPTURE DISC FOR ABHV0020													
ABPV0001	M-22AB01	G-3	2	B	8.0	GB	AO	Active	C	O/C	BTC	CS		CSJ-02	
											BTO	CS		CSJ-02	
											FC	CS		CSJ-02	TP-04
											PIT	Y2			
	Valve Name:	SG A MS TO ATMS PORV													
ABPV0002	M-22AB01	C-3	2	B	8.0	GB	AO	Active	C	O/C	BTC	CS		CSJ-02	
											BTO	CS		CSJ-02	
											FC	CS		CSJ-02	TP-04
											PIT	Y2			
	Valve Name:	SG B MS TO ATMS PORV													
ABPV0003	M-22AB01	C-6	2	B	8.0	GB	AO	Active	C	O/C	BTC	CS		CSJ-02	
											BTO	CS		CSJ-02	
											FC	CS		CSJ-02	TP-04
											PIT	Y2			
	Valve Name:	SG C MS TO ATMS PORV													
ABPV0004	M-22AB01	G-6	2	B	8.0	GB	AO	Active	C	O/C	BTC	CS		CSJ-02	
											BTO	CS		CSJ-02	
											FC	CS		CSJ-02	TP-04
											PIT	Y2			
	Valve Name:	SG D MS TO ATMS PORV													
ABV0007	M-22AB01	G-6	2	B	10.0	GT	MA	Active	LO	O/C	BTC	Y2			
	Valve Name:	SG D MS PORV MAN ISO													
ABV0018	M-22AB01	G-3	2	B	10.0	GT	MA	Active	LO	O/C	BTC	Y2			
	Valve Name:	SG A MS PORV MAN ISO													
ABV0029	M-22AB01	C-6	2	B	10.0	GT	MA	Active	LO	O/C	BTC	Y2			
	Valve Name:	SG C MS PORV MAN ISO													

Main Steam (AB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ABV0040	M-22AB01	C-2	2	B	10.0	GT	MA	Active	LO	O/C	BTC	Y2			
	Valve Name:	SG B MS PORV MAN ISO													
ABV0045	M-22AB02	H-7	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 4 SFTY RLF													
ABV0046	M-22AB02	H-7	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 4 SFTY RLF													
ABV0047	M-22AB02	H-6	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 4 SFTY RLF													
ABV0048	M-22AB02	H-5	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 4 SFTY RLF													
ABV0049	M-22AB02	H-5	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 4 SFTY RLF													
ABV0055	M-22AB02	F-7	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 1 SFTY RLF													
ABV0056	M-22AB02	F-7	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 1 SFTY RLF													
ABV0057	M-22AB02	F-6	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 1 SFTY RLF													
ABV0058	M-22AB02	F-5	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 1 SFTY RLF													
ABV0059	M-22AB02	F-5	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 1 SFTY RLF													
ABV0065	M-22AB02	D-7	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 2 SFTY RLF													
ABV0066	M-22AB02	D-7	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 2 SFTY RLF													
ABV0067	M-22AB02	D-6	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 2 SFTY RLF													
ABV0068	M-22AB02	D-5	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 2 SFTY RLF													

Main Steam (AB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ABV0069	M-22AB02	D-5	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 2 SFTY RLF													
ABV0075	M-22AB02	C-7	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 3 SFTY RLF													
ABV0076	M-22AB02	C-7	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 3 SFTY RLF													
ABV0077	M-22AB02	C-6	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 3 SFTY RLF													
ABV0078	M-22AB02	C-5	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 3 SFTY RLF													
ABV0079	M-22AB02	C-5	2	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	MS LOOP 3 SFTY RLF													
ABV0085	M-22AB02	D-4	2	B	4.0	GT	MA	Active	LO	O/C	BTC	Y2			
	Valve Name:	TDAFP STM SPLY FROM MS LOOP 2 MAN ISO													
ABV0087	M-22AB02	C-4	2	B	4.0	GT	MA	Active	LO	O/C	BTC	Y2			
	Valve Name:	TDAFP STM SPLY FROM MS LOOP 3 MAN ISO													
ABV0345	M-22AB01	H-2	NC	C	0.75	CK	SA	Active	SYS	O	CC	CS		CSJ-02	TP-01
											CO	CS		CSJ-02	
	Valve Name:	N2 SPLY CHECK VLV TO ABPV0001													
ABV0346	M-22AB01	H-2	NC	C	0.75	CK	SA	Active	SYS	C	CC	M3			
											CO	CS		CSJ-02	TP-01
	Valve Name:	AIR SPLY CHECK VLV TO ABPV0001													
ABV0347	M-22AB01	D-2	NC	C	0.75	CK	SA	Active	SYS	O	CC	CS		CSJ-02	TP-01
											CO	CS		CSJ-02	
	Valve Name:	N2 SPLY CHECK VLV TO ABPV0002													
ABV0348	M-22AB01	D-2	NC	C	0.75	CK	SA	Active	SYS	C	CC	M3			
											CO	CS		CSJ-02	TP-01
	Valve Name:	AIR SPLY CHECK VLV TO ABPV0002													
ABV0349	M-22AB01	D-5	NC	C	0.75	CK	SA	Active	SYS	O	CC	CS		CSJ-02	TP-01
											CO	CS		CSJ-02	
	Valve Name:	N2 SPLY CHECK VLV TO ABPV0003													

Main Steam (AB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ABV0350	M-22AB01	D-5	NC	C	0.75	CK	SA	Active	SYS	C	CC	M3			
											CO	CS		CSJ-02	TP-01
	Valve Name:	**AIR SPLY CHECK VLV TO ABPV0003**													
ABV0351	M-22AB01	H-5	NC	C	0.75	CK	SA	Active	SYS	O	CC	CS		CSJ-02	TP-01
											CO	CS		CSJ-02	
	Valve Name:	**N2 SPLY CHECK VLV TO ABPV0004**													
ABV0352	M-22AB01	H-5	NC	C	0.75	CK	SA	Active	SYS	C	CC	M3			
											CO	CS		CSJ-02	TP-01
	Valve Name:	**AIR SPLY CHECK VLV TO ABPV0004**													

Feedwater (AE)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
AEFCV0510	M-22AE01	F-7	NC	B	14.0	GB	AO	Active	O	C	BTC	CS		CSJ-27	
											FC	CS			TP-04
											PIT	Y2			
	Valve Name:	SG A MFW REG VLV													
AEFCV0520	M-22AE01	C-7	NC	B	14.0	GB	AO	Active	O	C	BTC	CS		CSJ-27	
											FC	CS			TP-04
											PIT	Y2			
	Valve Name:	SG B MFW REG VLV													
AEFCV0530	M-22AE01	A-7	NC	B	14.0	GB	AO	Active	O	C	BTC	CS		CSJ-27	
											FC	CS			TP-04
											PIT	Y2			
	Valve Name:	SG C MFW REG VLV													
AEFCV0540	M-22AE01	G-7	NC	B	14.0	GB	AO	Active	O	C	BTC	CS		CSJ-27	
											FC	CS			TP-04
											PIT	Y2			
	Valve Name:	SG D MFW REG VLV													
AEFCV0550	M-22AE01	E-7	NC	B	6.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			
											PIT	Y2			
	Valve Name:	SG A MFW REG VLV BYP VLV													
AEFCV0560	M-22AE01	C-7	NC	B	6.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			
											PIT	Y2			
	Valve Name:	SG B MFW REG VLV BYP VLV													
AEFCV0570	M-22AE01	A-7	NC	B	6.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			
											PIT	Y2			
	Valve Name:	SG C MFW REG VLV BYP VLV													
AEFCV0580	M-22AE01	G-7	NC	B	6.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			
											Y2	Y2			
	Valve Name:	SG D MFW REG VLV BYP VLV													

Feedwater (AE)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
AEFV0039	M-22AE02	G-3	2	B	14.0	GT	SA	Active	O	C	BTC	CS		CSJ-03	
											FC	CS		CSJ-03	TP-04
											PIT	Y2			
	Valve Name:	**SG A FW SPLY ISO FV**													
AEFV0040	M-22AE02	D-3	2	B	14.0	GT	SA	Active	O	C	BTC	CS		CSJ-03	
											FC	CS		CSJ-03	TP-04
											PIT	Y2			
	Valve Name:	**SG B FW SPLY ISO FV**													
AEFV0041	M-22AE02	D-6	2	B	14.0	GT	SA	Active	O	C	BTC	CS		CSJ-03	
											FC	CS		CSJ-03	TP-04
											PIT	Y2			
	Valve Name:	**SG C FW SPLY ISO FV**													
AEFV0042	M-22AE02	H-6	2	B	14.0	GT	SA	Active	O	C	BTC	CS		CSJ-03	
											FC	CS		CSJ-03	TP-04
											PIT	Y2			
	Valve Name:	**SG D FW SPLY ISO FV**													
AEPSE0001	M-22AE02	H-3	2	D	1	RV	SA	Active	C	O	RT	Y5			
	Valve Name:	**RUPTURE DISC FOR AEFV0039**													
AEPSE0002	M-22AE02	D-3	2	D	1	RV	SA	Active	C	O	RT	Y5			
	Valve Name:	**RUPTURE DISC FOR AEFV0040**													
AEPSE0003	M-22AE02	D-6	2	D	1	RV	SA	Active	C	O	RT	Y5			
	Valve Name:	**RUPTURE DISC FOR AEFV0041**													
AEPSE0004	M-22AE02	H-6	2	D	1	RV	SA	Active	C	O	RT	Y5			
	Valve Name:	**RUPTURE DISC FOR AEFV0042**													
AEV0120	M-22AE02	C-4	2	C	14.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-01	
											CO	OP			TP-09
	Valve Name:	**SG B FW SPLY CHECK**													
AEV0121	M-22AE02	F-4	2	C	14.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-01	
											CO	OP			TP-09
	Valve Name:	**SG A FW SPLY CHECK**													
AEV0122	M-22AE02	F-7	2	C	14.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-01	
											CO	OP			TP-09
	Valve Name:	**SG D FW SPLY CHECK**													

Feedwater (AE)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
AEV0123	M-22AE02	C-7	2	C	14.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-01	
											CO	OP			TP-09
	Valve Name:	**SG C FW SPLY CHECK**													
AEV0124	M-22AE02	C-3	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**SG B AUX FW SPLY CHECK**													
AEV0125	M-22AE02	F-3	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**SG A AUX FW SPLY CHECK**													
AEV0126	M-22AE02	F-6	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**SG D AUX FW SPLY CHECK**													
AEV0127	M-22AE02	C-6	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**SG C AUX FW SPLY CHECK**													

Auxiliary Feedwater (AL)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ALFV0030	M-22AL01	H-5	2	C	6.0	CK	SA	Active	SYS	O/C	CC	CS		CSJ-04	
											CO	CS		CSJ-04	
	Valve Name:	**MD AFP B DISCH AUTO RECIRC CONTROL CHECK VLV**													
ALFV0042	M-22AL01	D-5	2	C	6.0	CK	SA	Active	SYS	O/C	CC	CS		CSJ-04	
											CO	CS		CSJ-04	
	Valve Name:	**MD AFP A DISCH AUTO RECIRC CONTROL CHECK VLV**													
ALHV0005	M-22AL01	H-6	2	B	4.0	GB	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**MDAFP B TO S/G D HV**													
ALHV0006	M-22AL01	G-6	2	B	4.0	GB	AO	Active	O	O/C	BTC	M3			
											BTO	M3			
											FO	M3			TP-04
											PIT	Y2			
	Valve Name:	**TDAFP TO S/G D HV**													
ALHV0007	M-22AL01	F-6	2	B	4.0	GB	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**MDAFP B TO S/G A HV**													
ALHV0008	M-22AL01	E-6	2	B	4.0	GB	AO	Active	O	O/C	BTC	M3			
											BTO	M3			
											FO	M3			TP-04
											PIT	Y2			
	Valve Name:	**TDAFP TO S/G A HV**													
ALHV0009	M-22AL01	D-6	2	B	4.0	GB	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**MDAFP TO S/G B HV**													
ALHV0010	M-22AL01	D-6	2	B	4.0	GB	AO	Active	O	O/C	BTC	M3			
											BTO	M3			
											FO	M3			TP-04
											PIT	Y2			
	Valve Name:	**TDAFP TO S/G B HV**													

Auxiliary Feedwater (AL)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ALHV0011	M-22AL01	C-6	2	B	4.0	GB	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	MDAFP TO S/G C HV													
ALHV0012	M-22AL01	B-6	2	B	4.0	GB	AO	Active	O	O/C	BTC	M3			
											BTO	M3			
											FO	M3			TP-04
											PIT	Y2			
	Valve Name:	TD AFP TO S/G C HV													
ALHV0030	M-22AL01	F-3	3	B	6.0	BF	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	ESW TO MD AFP B HV													
ALHV0031	M-22AL01	E-3	3	B	6.0	BF	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	ESW TO MD AFP A HV													
ALHV0032	M-22AL01	C-3	3	B	8.0	BF	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	ESW TO TD AFP HV													
ALHV0033	M-22AL01	B-3	3	B	8.0	BF	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	ESW TO TD AFP HV													
ALHV0034	M-22AL01	H-3	3	B	8.0	GT	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	CST TO MD AFP B HV													
ALHV0035	M-22AL01	D-3	3	B	8.0	GT	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	CST TO MD AFP A HV													
ALHV0036	M-22AL01	B-3	3	B	10.0	GT	MO	Active	O	C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	CST TO TD AFP HV													
ALV0001	M-22AL01	B-4	3	C	10.0	CK	SA	A	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	CST TO TD AFP CHECK VLV													

Auxiliary Feedwater (AL)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ALV0002	M-22AL01	D-4	3	C	8.0	CK	SA	A	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	CST TO MD AFP A CHECK VLV													
ALV0003	M-22AL01	H-4	3	C	8.0	CK	SA	A	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	CST TO MD AFP B CHECK VLV													
ALV0006	M-22AL01	F-4	3	C	6.0	CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	ESW TO MD AFP B CHK VLV													
ALV0009	M-22AL01	E-4	3	C	6.0	CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	ESW TO MD AFP A CHK VLV													
ALV0012	M-22AL01	C-4	3	C	8.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	ESW TO TD AFP CHK VLV													
ALV0015	M-22AL01	B-4	3	C	8.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	ESW TO TD AFP CHK VLV													
ALV0033	M-22AL01	F-7	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	MDAFP B TO S/G A CHECK VLV													
ALV0036	M-22AL01	H-7	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	MDAFP B TO S/G D CHECK VLV													
ALV0045	M-22AL01	C-7	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	MDAFP A TO S/G C CHECK VLV													
ALV0048	M-22AL01	D-7	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	MDAFP A TO S/G B CHECK VLV													
ALV0054	M-22AL01	B-5	2	C	6.0	CK	SA	Active	SYS	O/C	CC	CS		CSJ-05	
											CO	CS		CSJ-05	
	Valve Name:	TD AFP DISCH CHECK VLV													

Auxiliary Feedwater (AL)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ALV0057	M-22AL01	E-7	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	TDAFP TO S/G A CHECK VLV													
ALV0062	M-22AL01	G-7	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	TDAFP TO S/G D CHECK VLV													
ALV0067	M-22AL01	D-7	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	TDAFP TO S/G B CHECK VLV													
ALV0072	M-22AL01	B-7	2	C	4.0	CK	SA	Active	SYS	O/C	CCT	CM			TP-08
											COF	CM			TP-08
	Valve Name:	TDAFP TO S/G C CHECK VLV													
ALV0148	M-22AL01	G-6	NC	C		CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	N2 SPLY CHECK VLV TO ALHV0006													
ALV0149	M-22AL01	G-6	NC	C		CK	SA	Active	SYS	C	CC	M3			
											CO	M3			TP-01
	Valve Name:	AIR SPLY CHECK VLV TO ALHV0006													
ALV0150	M-22AL01	F-6	NC	C		CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	N2 SPLY CHECK VLV TO ALHV0008													
ALV0151	M-22AL01	F-6	NC	C		CK	SA	Active	SYS	C	CC	M3			
											CO	M3			TP-01
	Valve Name:	AIR SPLY CHECK VLV TO ALHV0008													
ALV0152	M-22AL01	D-6	NC	C		CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	N2 SPLY CHECK VLV TO ALHV0010													
ALV0153	M-22AL01	D-6	NC	C		CK	SA	Active	SYS	C	CC	M3			
											CO	M3			TP-01
	Valve Name:	AIR SPLY CHECK VLV TO ALHV0010													
ALV0154	M-22AL01	B-6	NC	C		CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	N2 SPLY CHECK VLV TO ALHV0012													

Auxiliary Feedwater (AL)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ALV0155	M-22AL01	B-6	NC	C		CK	SA	Active	SYS	C	CC	M3			
											CO	M3			TP-01

Valve Name: **AIR SPLY CHECK VLV TO ALHV0012**

Reactor Coolant (BB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BB8010A	M-22BB02	G-7	1	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	RCS PZR SFTY RLF A													
BB8010B	M-22BB02	G-6	1	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	RCS PZR SFTY RLF B													
BB8010C	M-22BB02	G-5	1	C	6.0	RV	SA	Active	C	O/C	RT	Y5			
	Valve Name:	RCS PZR SFTY RLF C													
BB8378A	M-22BB01	E-4	1	C	3.0	CK	SA	Active	SYS	C	CC	CM		RJ-02	TP-11
											CO	RR		RJ-02	TP-01
	Valve Name:	RCS LOOP 1 COLD LEG CVCS REGEN HX CHG LINE DNSTRM CHECK													
BB8378B	M-22BB01	E-4	1	C	3.0	CK	SA	Active	SYS	C	CC	CM		RJ-02	TP-11
											CO	RR		RJ-02	TP-01
	Valve Name:	RCS LOOP 1 COLD LEG CVCS REGEN HX CHG LINE UPSTRM CHECK													
BB8379A	M-22BB01	E-7	1	C	3.0	CK	SA	Active	SYS	C	CC	CM		RJ-02	TP-11
											CO	RR		RJ-02	TP-01
	Valve Name:	RCS LOOP 4 COLD LEG CVCS REGEN HX CHG LINE DNSTRM CHECK													
BB8379B	M-22BB01	E-7	1	C	3.0	CK	SA	Active	SYS	C	CC	CM		RJ-02	TP-11
											CO	RR		RJ-02	TP-01
	Valve Name:	RCS LOOP 4 COLD LEG CVCS REGEN HX CHG LINE UPSTRM CHECK													
BB8948A	M-22BB01	E-4	1	AC	10.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCS LOOP 1 COLD LEG SI ACC CHECK													
BB8948B	M-22BB01	D-4	1	AC	10.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCS LOOP 2 COLD LEG SI ACC CHECK													
BB8948C	M-22BB01	D-6	1	AC	10.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCS LOOP 3 COLD LEG SI ACC CHECK													

Reactor Coolant (BB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BB8948D	M-22BB01	E-6	1	AC	10.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCS LOOP 4 COLD LEG SI ACC CHECK													
BB8949B	M-22BB01	C-5	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCS LOOP 2 HOT LEG SI/RHR PMPS CHECK													
BB8949C	M-22BB01	C-6	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCS LOOP 3 HOT LEG SI/RHR PMPS CHECK													
BB8949D	M-22BB01	G-6	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCS LOOP 4 HOT LEG SI PMPS CHECK													
BB8949E	M-22BB01	E-5	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCS LOOP 1 HOT LEG SI PMPS CHECK													
BBHV0013	M-22BB03A	C-2	3	B	3.0	GT	MO	Active	O	C	BTC	RR		RJ-03	
											PIT	Y2			
	Valve Name:	RCP A THRM BAR COOL COIL COOL WTR OUT HV													
BBHV0014	M-22BB03B	C-2	3	B	3.0	GT	MO	Active	O	C	BTC	RR		RJ-03	
											PIT	Y2			
	Valve Name:	RCP B THRM BAR COOL COIL COOL WTR OUT HV													
BBHV0015	M-22BB03C	C-2	3	B	3.0	GT	MO	Active	O	C	BTC	RR		RJ-03	
											PIT	Y2			
	Valve Name:	RCP C THRM BAR COOL COIL COOL WTR OUT HV													
BBHV0016	M-22BB03D	C-2	3	B	3.0	GT	MO	Active	O	C	BTC	RR		RJ-03	
											PIT	Y2			
	Valve Name:	RCP D THRM BAR COOL COIL COOL WTR OUT HV													

Reactor Coolant (BB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BBHV8000A	M-22BB02	E-7	1	B	3.0	GT	MO	Active	O	O/C	BTC	M3		RJ-04	
											BTO	M3		RJ-04	
											PIT	Y2			
	Valve Name:	**RCS PZR OUT PWR OPER RLF HV**													
BBHV8000B	M-22BB02	E-7	1	B	3.0	GT	MO	Active	O	O/C	BTC	M3		RJ-04	
											BTO	M3		RJ-04	
											PIT	Y2			
	Valve Name:	**RCS PZR OUT PWR OPER RLF HV**													
BBHV8001A	M-22BB04	F-4	2	B	1.0	GB	SO	Active	C	O/C	BTC	CS		CSJ-06	
											BTO	CS		CSJ-06	
											FC	CS		CSJ-06	TP-04
											PIT	Y2			
	Valve Name:	**RCS RV HEAD VENT PROT A UPSTRM HV**													
BBHV8001B	M-22BB04	E-4	2	B	1.0	GB	SO	Active	C	O/C	BTC	CS		CSJ-06	
											BTO	CS		CSJ-06	
											FC	CS		CSJ-06	TP-04
											PIT	Y2			
	Valve Name:	**RCS RV HEAD VENT PROT B UPSTRM HV**													
BBHV8002A	M-22BB04	F-3	2	B	1.0	GB	SO	Active	C	O/C	BTC	CS		CSJ-06	
											BTO	CS		CSJ-06	
											FC	CS		CSJ-06	TP-04
											PIT	Y2			
	Valve Name:	**RCS RV HEAD VENT PROT A DNSTRM HV**													
BBHV8002B	M-22BB04	E-3	2	B	1.0	GB	SO	Active	C	O/C	BTC	CS		CSJ-06	
											BTO	CS		CSJ-06	
											FC	CS		CSJ-06	TP-04
											PIT	Y2			
	Valve Name:	**RCS RV HEAD VENT PROT B DNSTRM HV**													
BBHV8026	M-22BB02	E-3	2	A	1.0	DI	AO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**RCS PRT N2/SERV GAS SPLY DNSTRM ISO HV**													

Reactor Coolant (BB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BBHV8027	M-22BB02	E-3	2	A	1.0	DI	AO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**RCS PRT N2/SERV GAS SPLY UPSTRM ISO HV**													
BBHV8157A	M-22BB02	E-1	2	B	1.0	GB	SO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	**PRT TO EX LTDN HX PROT A ISO HV**													
BBHV8157B	M-22BB02	D-1	2	B	1.0	GB	SO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	**PRT TO EX LTDN HX PROT B ISO HV**													
BBHV8351A	M-22BB03A	C-5	2	A	2.0	GB	MO	Active	O	O/C	AT-01	App-J			
											BTC	RR		RJ-05	
											BTO	RR		RJ-05	
											PIT	Y2			
	Valve Name:	**RCP A SEAL WTR SPLY ISO HV**													
BBHV8351B	M-22BB03B	C-5	2	A	2.0	GB	MO	Active	O	O/C	AT-01	App-J			
											BTC	RR		RJ-05	
											BTO	RR		RJ-05	
											PIT	Y2			
	Valve Name:	**RCP B SEAL WTR SPLY ISO HV**													
BBHV8351C	M-22BB03C	C-5	2	A	2.0	GB	MO	Active	O	O/C	AT-01	App-J			
											BTC	RR		RJ-05	
											BTO	RR		RJ-05	
											PIT	Y2			
	Valve Name:	**RCP C SEAL WTR SPLY ISO HV**													
BBHV8351D	M-22BB03D	C-5	2	A	2.0	GB	MO	Active	O	O/C	AT-01	App-J			
											BTC	RR		RJ-05	
											BTO	RR		RJ-05	
											PIT	Y2			
	Valve Name:	**RCP D SEAL WTR SPLY ISO HV**													

Reactor Coolant (BB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BBPCV0455A	M-22BB02	E-7	1	B	3.0	GB	SO	Active	C	O/C	BTC	CS		CSJ-07	
											BTO	CS		CSJ-07	
											FC	CS		CSJ-07	TP-04
											PIT	Y2			
	Valve Name:	**RCS PRESSURIZER POWER OPERATED RELIEF VALVE**													
BBPCV0456A	M-22BB02	E-8	1	B	3.0	GB	SO	Active	C	O/C	BTC	CS		CSJ-07	
											BTO	CS		CSJ-07	
											FC	CS		CSJ-07	TP-04
											PIT	Y2			
	Valve Name:	**RCS PRESSURIZER POWER OPERATED RELIEF VALVE**													
BBPV8702A	M-22BB01	E-4	1	A	12.0	GT	MO	Active	C	C	AT-02	Y2			
											BTC	CS		CSJ-08	
											PIT	Y2			
	Valve Name:	**RCS LOOP 1 HOT LEG TO RHR PMPS PCV ISO**													
BBPV8702B	M-22BB01	H-6	1	A	12.0	GT	MO	Active	C	C	AT-02	Y2			
											BTC	CS		CSJ-08	
											PIT	Y2			
	Valve Name:	**RCS LOOP 4 HOT LEG TO RHR PMPS PCV ISO**													
BBV0001	M-22BB01	D-5	1	AC	1.5	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	**RCS LOOP 1 COLD LEG SI BIT CHECK**													
BBV0022	M-22BB01	D-4	1	AC	1.5	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	**RCS LOOP 2 COLD LEG SI BIT CHECK**													
BBV0040	M-22BB01	D-6	1	AC	1.5	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	**RCS LOOP 3 COLD LEG SI BIT CHECK**													

Reactor Coolant (BB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BBV0059	M-22BB01	E-6	1	AC	1.5	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	**RCS LOOP 4 COLD LEG SI BIT CHECK**													
BBV0118	M-22BB03A	C-5	2	AC	2.0	CK	SA	Active	SYS	O/C	AT-01	App-J			
											CCF	CM			TP-08
											CO	OP			TP-09
											COF	CM			TP-08
	Valve Name:	**RCP A SEAL WTR SPLY ISO BBV0119 UPSTRM CHECK**													
BBV0120	M-22BB03A	C-4	1	C	2.0	CK	SA	Active	SYS	O/C	CC	CM			TP-11
											CCA	CM			TP-08
											CO	OP			TP-09
											COF	CM			TP-08
	Valve Name:	**RCP A SEAL WTR SPLY ISO BBV0119 DNSTRM CHECK**													
BBV0121	M-22BB03A	C-4	1	C	2.0	CK	SA	Active	SYS	O/C	CC	CM			TP-11
											CCA	CM			TP-08
											CO	OP			TP-09
											COF	CM			TP-08
	Valve Name:	**RCP A SEAL WTR SPLY CHECK**													
BBV0122	M-22BB03A	C-4	3	C	1.5	CK	SA	Active	SYS	C	CC	RR		RJ-06	
											CO	OP			TP-01
	Valve Name:	**CCW TO RCP A THERMAL BARRIER SPLY CK VLV**													
BBV0148	M-22BB03B	C-5	2	AC	2.0	CK	SA	Active	SYS	O/C	AT-01	App-J			
											CCF	CM			TP-08
											CO	OP			TP-09
											COF	CM			TP-08
	Valve Name:	**RCP B SEAL WTR SPLY ISO BBV0149 UPSTRM CHECK**													
BBV0150	M-22BB03B	C-4	1	C	2.0	CK	SA	Active	SYS	O/C	CC	CM			TP-11
											CCA	CM			TP-08
											CO	OP			TP-09
											COF	CM			TP-08
	Valve Name:	**RCP B SEAL WTR SPLY ISO BBV0149 DNSTRM CHECK**													

Reactor Coolant (BB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BBV0151	M-22BB03B	C-4	1	C	2.0	CK	SA	Active	SYS	O/C	CC	CM			TP-11
											CCA	CM			TP-08
											CO	OP			TP-09
											COF	CM			TP-08
	Valve Name:	RCP B SEAL WTR SPLY CHECK													
BBV0152	M-22BB03B	C-4	3	C	1.5	CK	SA	Active	SYS	C	CC	RR		RJ-06	
											CO	OP			TP-01
	Valve Name:	CCW TO RCP B THERMAL BARRIER SPLY CK VLV													
BBV0178	M-22BB03C	C-5	2	AC	2.0	CK	SA	Active	SYS	O/C	AT-01	App-J			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCP C SEAL WTR SPLY ISO BBV0179 UPSTRM CHECK													
BBV0180	M-22BB03C	C-4	1	C	2.0	CK	SA	Active	SYS	O/C	CC	CM			TP-11
											CCA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCP C SEAL WTR SPLY ISO BBV0179 DNSTRM CHECK													
BBV0181	M-22BB03C	C-4	1	C	2.0	CK	SA	Active	SYS	O/C	CC	CM			TP-11
											CCA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCP C SEAL WTR SPLY CHECK													
BBV0182	M-22BB03C	C-4	3	C	1.5	CK	SA	Active	SYS	C	CC	RR		RJ-06	
											CO	OP			TP-01
	Valve Name:	CCW TO RCP C THERMAL BARRIER SPLY CK VLV													
BBV0208	M-22BB03D	C-5	2	AC	2.0	CK	SA	Active	SYS	O/C	AT-01	App-J			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCP D SEAL WTR SPLY ISO BBV0209 UPSTRM CHECK													
BBV0210	M-22BB03D	C-4	1	C	2.0	CK	SA	Active	SYS	O/C	CC	CM			TP-11
											CCA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	RCP D SEAL WTR SPLY ISO BBV0209 DNSTRM CHECK													

Reactor Coolant (BB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BBV0211	M-22BB03D	C-4	1	C	2.0	CK	SA	Active	SYS	O/C	CC	CM			TP-11
											CCA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**RCP D SEAL WTR SPLY CHECK**													
BBV0212	M-22BB03D	C-4	3	C	1.5	CK	SA	Active	SYS	C	CC	RR		RJ-06	
											CO	OP			TP-01
	Valve Name:	**CCW TO RCP D THERMAL BARRIER SPLY CK VLV**													
BBV0474	M-22BB03A	C-5	3	C	1.5	CK	SA	Active	SYS	C	CC	RR		RJ-06	
											CO	OP			TP-01
	Valve Name:	**CCW TO RCP A THERMAL BARRIER SPLY CK VLV**													
BBV0476	M-22BB03B	C-5	3	C	1.5	CK	SA	Active	SYS	C	CC	RR		RJ-06	
											CO	OP			TP-01
	Valve Name:	**CCW TO RCP B THERMAL BARRIER SPLY CK VLV**													
BBV0479	M-22BB03C	C-5	3	C	1.5	CK	SA	Active	SYS	C	CC	RR		RJ-06	
											CO	OP			TP-01
	Valve Name:	**CCW TO RCP C THERMAL BARRIER SPLY CK VLV**													
BBV0480	M-22BB03D	C-5	3	C	1.5	CK	SA	Active	SYS	C	CC	RR		RJ-06	
											CO	OP			TP-01
	Valve Name:	**CCW TO RCP D THERMAL BARRIER SPLY CK VLV**													

Chemical and Volume Control (BG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BG8121	M-22BG01	D-3	2	C	2.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**SEAL WTR RTN HDR PRESS RELIEF**													
BG8123	M-22BG03	H-3	2	C	2.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**CVCS SEAL WTR HX IN HDR PRESS RELIEF**													
BG8124	M-22BG03	C-7	2	C	0.75	RV	SA	Active	C	O	RT	Y10			
	Valve Name:	**CCP A & B SUCTION PRESS RELIEF**													
BG8381	M-22BG01	F-4	2	AC	3.0	CK	SA	Active	SYS	C	AT-01	App-J			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**CCP A & B TO REGEN HX CHECK**													
BG8440	M-22BG03	E-6	2	C	4.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-07	
											CO	OP			TP-09
	Valve Name:	**VCT TO NCP/CCP HDR CHECK**													
BG8481A	M-22BG03	C-4	2	C	4.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-08	
											CO	RR		RJ-08	
	Valve Name:	**CVCS CCP A DISCH CHECK**													
BG8481B	M-22BG03	B-4	2	C	4.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-08	
											CO	RR		RJ-08	
	Valve Name:	**CVCS CCP B DISCH CHECK**													
BG8497	M-22BG03	E-4	2	C	3.0	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-01
	Valve Name:	**CVCS NCP DISCH CHECK**													
BG8546A	M-22BG03	C-7	2	AC	8.0	CK	SA	Active	SYS	O/C	AT-03	Y2			
											CC	RR		RJ-09	
											CO	RR		RJ-09	
	Valve Name:	**RWST TO CCP A SUCT CHECK**													
BG8546B	M-22BG03	B-7	2	AC	8.0	CK	SA	Active	SYS	O/C	AT-03	Y2			
											CC	RR		RJ-09	
											CO	RR		RJ-09	
	Valve Name:	**RWST TO CCP B SUCT CHECK**													

Chemical and Volume Control (BG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BGHV8100	M-22BG01	D-2	2	A	2.0	GB	MO	Active	O	C	AT-01	App-J			
											BTC	RR		CSJ-28	
											PIT	Y2			
	Valve Name:	**SEAL WTR RTN OUTER CTMT ISO**													
BGHV8104	M-22BG05	A-4	2	B	2.0	GB	MO	Active	C	O	BTO	M3			
											PIT	M3			
	Valve Name:	**EMERG BORATE TO CCP A & B HDR ISO HV**													
BGHV8105	M-22BG03	E-2	2	A	3.0	GT	MO	Active	O	C	AT-01	App-J			
											BTC	CS		CSJ-09	
											PIT	Y2			
	Valve Name:	**CVCS CHARGING HDR TO REGEN HX OUTER CTMT ISO VLV**													
BGHV8106	M-22BG03	E-2	2	B	3	GT	MO	Active	O	C	BTC	CS		CSJ-09	
											PIT	Y2			
	Valve Name:	**CVCS CHARGING HDR TO REGEN HX OUTER CTMT ISO VLV**													
BGHV8110	M-22BG03	E-3	2	B	2.0	GB	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**A CCP DISCH MINIFLOW TO SEAL WTR HX ISO**													
BGHV8111	M-22BG03	E-4	2	B	2.0	GB	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**CCP B DISCH MINIFLOW ISO VLV**													
BGHV8112	M-22BG01	D-2	2	A	2.0	GB	MO	Active	O	C	AT-01	App-J			
											BTC	RR		CSJ-28	
											PIT	Y2			
	Valve Name:	**SEAL WTR RTN INNER CTMT ISO HV**													
BGHV8152	M-22BG01	F-2	2	A	3.0	GB	AO	Active	O	C	AT-01	App-J			
											BTC	CS		CSJ-10	
											FC	CS		CSJ-10	TP-04
											PIT	Y2			
	Valve Name:	**CVCS LTDN SYS OUT CTMT ISO HV**													

Chemical and Volume Control (BG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BGHV8153A	M-22BG01	D-7	1	B	1.0	GB	SO	Active	C	O/C	BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RCS TO CVCS EX LTDN HX DNSTRM ISO PROT A HV													
BGHV8153B	M-22BG01	D-7	1	B	1.0	GB	SO	Active	C	O/C	BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RCS TO CVCS EX LTDN HX DNSTRM ISO PROT B HV													
BGHV8154A	M-22BG01	D-8	1	B	1.0	GB	SO	Active	C	O/C	BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RCS TO CVCS EX LTDN HX UPSTRM ISO PROT A HV													
BGHV8154B	M-22BG01	D-8	1	B	1.0	GB	SO	Active	C	O/C	BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RCS TO CVCS EX LTDN HX UPSTRM ISO PROT B HV													
BGHV8160	M-22BG01	F-3	2	A	3.0	GB	AO	Active	O	C	AT-01	App-J			
											BTC	CS		CSJ-10	
											FC	CS		CSJ-10	TP-04
											PIT	Y2			
	Valve Name:	CVCS LTDN SYS INNER CTMT ISO HV													
BGHV8357A	M-22BG03	C-4	2	B	1.0	GB	MO	Active	C	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	CVCS CCP A DISCH TO RCP SEALS THROTTLE VLV													
BGHV8357B	M-22BG03	B-4	2	B	1.0	GB	MO	Active	C	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	CVCS CCP B DISCH TO RCP SEALS THROTTLE VLV													

Chemical and Volume Control (BG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BGLCV0112B	M-22BG03	F-6	2	B	4.0	GT	MO	Active	O	C	BTC	CS		CSJ-11	
											PIT	Y2			
	Valve Name:	CVCS VCT OUT UPSTRM ISO													
BGLCV0112C	M-22BG03	F-6	2	B	4.0	GT	MO	Active	O	C	BTC	CS		CSJ-11	
											PIT	Y2			
	Valve Name:	CVCS VCT OUT DNSTRM ISO													
BGLCV0459	M-22BG01	G-7	1	B	3.0	GB	AO	Active	O	C	BTC	CS		CSJ-12	
											FC	CS		CSJ-12	TP-04
											PIT	Y2			
	Valve Name:	RCS LOOP 3 LTDN TO REGEN HX DNSTRM LCV													
BGLCV0460	M-22BG01	G-7	1	B	3.0	GB	AO	Active	O	C	BTC	CS		CSJ-12	
											FC	CS		CSJ-12	TP-04
											PIT	Y2			
	Valve Name:	RCS LOOP 3 LTDN TO REGEN HX UPSTRM LCV													
BGV0091	M-22BG03	E-4	2	C	2.0	CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	CCP A DISCH TO SEAL WTR HX CHECK													
BGV0095	M-22BG03	E-4	2	C	2.0	CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	CCP B DISCH TO SEAL WTR HX CHECK													
BGV0135	M-22BG01	D-3	2	AC	0.75	CK	SA	Active	SYS	O/C	AT-01	App-J			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	SEAL WTR RTN INNER CTMT BGHV8112 DRN CHECK													
BGV0147	M-22BG05	B-6	3	C	3.0	CK	SA	Active	SYS	O/C	CC	OP			
											CO	CS		CSJ-13	
	Valve Name:	CVCS BA XFR PMP A DISCH CHECK													
BGV0155	M-22BG05	B-6	3	C	0.75	CK	SA	Active	SYS	O	CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	CVCS BA XFR PMP A DISCH TO BAT A CHECK													
BGV0165	M-22BG05	A-6	3	C	3.0	CK	SA	Active	SYS	O/C	CC	OP			
											CO	CS		CSJ-13	
	Valve Name:	CVCS BA XFR PMP B DISCH CHECK													

Chemical and Volume Control (BG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BGV0167	M-22BG05	B-6	3	C	0.75	CK	SA	Active	SYS	O	CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	CVCS BA XFR PMP B DISCH TO BAT B CHECK													
BGV0174	M-22BG05	A-4	2	C	3.0	CK	SA	Active	SYS	O/C	CC	CM		CSJ-13	TP-11
											CO	CS		CSJ-13	
	Valve Name:	CVCS EMERG BORATE TO CCP A & B HDR CHECK													
BGV0589	M-22BG03	B-4	2	C	1.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	CCP B DISCH TO SEAL WTR INJ FLTRS HDR CHECK													
BGV0590	M-22BG03	C-4	2	C	1.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	CCP A DISCH TO SEAL WTR INJ FLTRS HDR CHECK													
BGV0605	M-22BG03	C-3	2	C	3.0	CK	SA	Active	SYS	C	CC	M3			
											CO	M3			TP-01
	Valve Name:	CCP B DISCH BGFCV0121 UPSTREAM CHECK													
BGV0606	M-22BG03	D-3	2	C	3.0	CK	SA	Active	SYS	C	CC	M3			
											CO	M3			TP-01
	Valve Name:	CCP A DISCH BGFCV0121 UPSTREAM CHECK													
BGV0645	M-22BG03	D-4	2	C	3.0	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-01
	Valve Name:	CVCS NCP DISCH UPSTRM CHECK													

Reactor Makeup Water (BL)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BL8046	M-22BL01	B-3	2	AC	3.0	CK	SA	Active	SYS	C	AT-01	App-J			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**RX M/U WTR SPLY INNER CTMT CHECK**													
BLHV8047	M-22BL01	B-4	2	A	3.0	DI	AO	Active	SYS	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**RX M/U WTR OUTER CTMT HV ISO**													

Steam Generator Blowdown (BM)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BMHV0001	M-22BM01	F-5	2	B	4.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG A B/D ISO VLV**													
BMHV0002	M-22BM01	E-5	2	B	4.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG B B/D ISO VLV**													
BMHV0003	M-22BM01	C-5	2	B	4.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG C B/D ISO VLV**													
BMHV0004	M-22BM01	A-5	2	B	4.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG D B/D ISO VLV**													
BMHV0019	M-22BM01	G-7	2	B	1.0	GB	SO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG A B/D NUC SAMP SYS UP LINE ISO CTRL VLV**													
BMHV0020	M-22BM01	E-7	2	B	1.0	GB	SO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG B B/D NUC SAMP SYS UP LINE ISO CTRL VLV**													
BMHV0021	M-22BM01	D-7	2	B	1.0	GB	SO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG C B/D NUC SAMP SYS UP LINE ISO CTRL VLV**													
BMHV0022	M-22BM01	B-7	2	B	1.0	GB	SO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG D B/D NUC SAMP SYS UP LINE ISO CTRL VLV**													

Steam Generator Blowdown (BM)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BMHV0035	M-22BM01	G-7	2	B	1.0	GB	SO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG A B/D NUC SAMP SYS LWR LINE ISO CTRL VLV**													
BMHV0036	M-22BM01	E-7	2	B	1.0	GB	SO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG B B/D NUC SAMP SYS LWR LINE ISO CTRL VLV**													
BMHV0037	M-22BM01	C-7	2	B	1.0	GB	SO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG C B/D NUC SAMP SYS LWR LINE ISO CTRL VLV**													
BMHV0038	M-22BM01	B-7	2	B	1.0	GB	SO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG D B/D NUC SAMP SYS LWR LINE ISO CTRL VLV**													
BMHV0065	M-22BM01	G-6	2	B	1.0	GB	SO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG A B/D NUC SAMP SYS LINE ISO UPSTRM HV**													
BMHV0066	M-22BM01	E-6	2	B	1.0	GB	SO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG B B/D NUC SAMP SYS LINE ISO UPSTRM HV**													
BMHV0067	M-22BM01	C-6	2	B	1.0	GB	SO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG C B/D NUC SAMP SYS LINE ISO UPSTRM HV**													
BMHV0068	M-22BM01	B-6	2	B	1.0	GB	SO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SG D B/D NUC SAMP SYS LINE ISO UPSTRM HV**													
BMV0045	M-22BM01	A-4	2	A	3.0	GT	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	**SG DRN PMPS SUCT HDR INNER CTMT ISO**													

Steam Generator Blowdown (BM)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BMV0046	M-22BM01	A-3	2	A	3.0	GT	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	**SG DRN PMPS SUCT HDR OUTER CTMT ISO**													

Borated Refueling Water Storage (BN)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BN8717	M-22BN01	B-5	2	A	8.0	GT	MA	Passive	LC	C	AT-03	Y2			
											PIT	Y2			
	Valve Name:	**RHR SPLY TO RWST ISO (3.0.3)**													
BNHCV8800A	M-22BN01	E-5	2	B	3.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**RWST TO RFP DNSTRM HV**													
BNHCV8800B	M-22BN01	E-5	2	B	3.0	GB	AO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**RWST TO RFP UPSTRM HV**													
BNHV0003	M-22BN01	C-3	2	B	12.0	GT	MO	Active	O	O/C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**RWST TO CTMT SPRY PMP B HV**													
BNHV0004	M-22BN01	A-3	2	B	12.0	GT	MO	Active	O	O/C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**RWST TO CTMT SPRY PMP A HV**													
BNHV8806A	M-22BN01	B-5	2	A	8.0	GT	MO	Active	O	O/C	AT-03	Y2			
											BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**SI PMP A SUCT FROM RWST ISO**													
BNHV8806B	M-22BN01	E-3	2	A	8.0	GT	MO	Active	O	O/C	AT-03	Y2			
											BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**SI PMP B SUCT FROM RWST ISO**													
BNHV8812A	M-22BN01	B-3	2	B	14.0	GT	MO	Active	O	O/C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**RWST TO RHR PMP A SUCT ISO VLV**													
BNHV8812B	M-22BN01	D-3	2	B	14.0	GT	MO	Active	O	O/C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**RWST TO RHR PMP B SUCT ISO VLV**													

Borated Refueling Water Storage (BN)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
BNHV8813	M-22BN01	B-7	2	A	2.0	GB	MO	Active	O	C	AT-03	Y2			
											BTC	CS		CSJ-14	
											PIT	Y2			
	Valve Name:	**SI PMPS MINIFLOW TO RWST ISO VLV (3.0.3)**													
BNLCV0112D	M-22BN01	A-5	2	A	8.0	GT	MO	Active	C	O/C	AT-03	Y2			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**CCP A SUCT FROM RWST ISO VLV**													
BNLCV0112E	M-22BN01	E-3	2	A	8.0	GT	MO	Active	C	O/C	AT-03	Y2			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**CCP B SUCT FROM RWST ISO VLV**													
BNV0011	M-22BN01	F-4	2	B	24.0	GT	MA	Passive	LO	O	PIT	Y2			
	Valve Name:	**RWST OUT ISO (3.0.3)**													

Fuel Pool Cooling and Cleanup (EC)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ECHV0011	M-22EC01	H-5	3	B	12	BF	MO	Active	O	C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	FUEL POOL HX A SHELL SIDE CCW OUT ISO													
ECHV0012	M-22EC01	F-5	3	B	12	BF	MO	Active	O	C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	FUEL POOL HX B SHELL SIDE CCW OUT ISO													
ECV0004	M-22EC01	H-6	3	N/A	10	CK	SA	N/A	SYS	N/A	CCF	RR			
											COF	RR			
	Valve Name:	FUEL POOL COOLING PUMP "A" DISCHARGE CHECK VALVE													
ECV0013	M-22EC01	E-6	3	N/A	10	CK	SA	N/A	SYS	N/A	CCF	RR			
											COF	RR			
	Valve Name:	FUEL POOL COOLING PUMP "B" DISCHARGE CHECK VALVE													
ECV0083	M-22EC02	C-5	2	A	6	GT	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	FUEL POOL CLN-UP DEMIN TO REFUEL POOL OUTER CTMT ISO													
ECV0084	M-22EC02	C-6	2	A	6	GT	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	FUEL POOL CLN/U DEMIN TO RFP INNER CTMT ISO													
ECV0087	M-22EC02	D-7	2	A	6	GT	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	RFP TO SFP INNER CTMT ISO													
ECV0088	M-22EC02	D-7	2	A	6	GT	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	REFUEL POOL TO SFP OUTER CTMT ISO													
ECV0095	M-22EC02	B-5	2	A	3	GT	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	FUEL POOL SKIMMER PUMP SUCT INNER CTMT ISO													
ECV0096	M-22EC02	B-5	2	A	3	GT	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	REFUEL POOL SKIMMER PMP SUCT OUTER CTMT ISO													

Essential Service Water (EF)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EFHV0023	M-22EF01	F-7	3	B	30.0	BF	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	**SERV WTR TO ESW TRN A UPSTRM HV**													
EFHV0024	M-22EF01	E-7	3	B	30.0	BF	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	**SERV WTR TO ESW TRN B UPSTRM HV**													
EFHV0025	M-22EF01	F-7	3	B	30.0	BF	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	**SERV WTR TO ESW TRN A DNSTRM HV**													
EFHV0026	M-22EF01	E-7	3	B	30.0	BF	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	**SERV WTR TO ESW TRN B DNSTRM HV**													
EFHV0031	M-22EF02	G-7	2	A	14.0	BF	MO	Active	O	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN A TO CTMT AIR CLRS OUTER CTMT HV**													
EFHV0032	M-22EF02	B-7	2	A	14.0	BF	MO	Active	O	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN B TO CTMT AIR CLRS OUTER CTMT HV**													
EFHV0033	M-22EF02	G-7	2	A	14.0	BF	MO	Active	O	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN A TO CTMT AIR CLRS INNER CTMT HV**													
EFHV0034	M-22EF02	B-7	2	A	14.0	BF	MO	Active	O	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN B TO CTMT AIR CLRS INNER CTMT HV**													

Essential Service Water (EF)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EFHV0037	M-22EF02	G-2	3	B	30.0	BF	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	ESW TRN A TO UHS HV													
EFHV0038	M-22EF02	C-2	3	B	30.0	BF	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	ESW TRN B TO UHS HV													
EFHV0039	M-22EF02	F-2	3	B	30.0	BF	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	ESW TRN A TO SERV WTR UPSTRM HV													
EFHV0040	M-22EF02	D-2	3	B	30.0	BF	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	ESW TRN B TO SERV WTR UPSTRM HV													
EFHV0041	M-22EF02	E-2	3	B	30.0	BF	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	ESW TRN A TO SERV WTR DNSTRM HV													
EFHV0042	M-22EF02	D-2	3	B	30.0	BF	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	ESW TRN B TO SERV WTR DNSTRM HV													
EFHV0043	M-22EF02	E-7	3	B	2.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	ESW TRN A TO SERV AIR CMPSR A ISO													
EFHV0044	M-22EF01	B-7	3	B	2.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	ESW TRN B TO SERV AIR CMPSR B ISO													
EFHV0045	M-22EF02	G-6	2	A	14.0	BF	MO	Active	O	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	ESW TRN A FROM CTMT AIR CLRS INNER CTMT HV													

Essential Service Water (EF)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EFHV0046	M-22EF02	B-6	2	A	14.0	BF	MO	Active	O	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN B FROM CTMT AIR CLRS INNER CTMT HV**													
EFHV0047	M-22EF02	G-6	2	A	10.0	BF	MO	Active	O	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN A FROM CTMT AIR CLRS BYP ISO HV**													
EFHV0048	M-22EF02	C-6	2	A	10.0	BF	MO	Active	O	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN B FROM CTMT AIR CLRS BYP ISO HV**													
EFHV0049	M-22EF02	G-6	2	A	14.0	BF	MO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN A FROM CTMT AIR CLRS OUTER CTMT HV**													
EFHV0050	M-22EF02	B-6	2	A	14.0	BF	MO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN B FROM CTMT AIR CLRS OUTER CTMT HV**													
EFHV0051	M-22EF02	G-4	3	B	24.0	BF	MO	Active	O/C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN A TO CCW HX A HV**													
EFHV0052	M-22EF02	C-4	3	B	24.0	BF	MO	Active	O/C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN B TO CCW HX B HV**													
EFHV0059	M-22EF02	G-3	3	B	24.0	BF	MO	Active	O/C	C	BTC	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN A FROM CCW HX A HV**													

Essential Service Water (EF)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EFHV0060	M-22EF02	C-3	3	B	24.0	BF	MO	Active	O/C	C	BTC	M3			
											PIT	Y2			
	Valve Name:	**ESW TRN B FROM CCW HX B HV**													
EFHV0065	M-U2EF01	B-6	3	B	30.0	BF	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW UHS COOL-TWR TRN A BYP HV**													
EFHV0066	M-U2EF01	B-3	3	B	30.0	BF	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW UHS COOL-TWR TRN B BYP HV**													
EFHV0097	M-U2EF01	F-6	3	B	3.0	GT	MO	Active	O	O/C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**ESW PMP A DISCH RECIRC HV**													
EFHV0098	M-U2EF01	D-6	3	B	3.0	GT	MO	Active	O	O/C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**ESW PMP B DISCH RECIRC HV**													
EFPDV0019	M-U2EF01	F-4	3	B	3.0	GT	MO	Active	C	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW S-C STR A DRN DP CTRL VLV**													
EFPDV0020	M-U2EF01	D-4	3	B	3.0	GT	MO	Active	C	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW S-C STR B DRN DP CTRL VLV**													
EFV0001	M-U2EF01	G-5	3	C	30.0	CK	SA	Active	SYS	O	CC	OP			TP-01
											CO	M3			
	Valve Name:	**ESW PMP A DISCH CHECK**													
EFV0004	M-U2EF01	D-5	3	C	30.0	CK	SA	Active	SYS	O	CC	OP			TP-01
											CO	M3			
	Valve Name:	**ESW PMP B DISCH CHECK**													

Essential Service Water (EF)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EFV0046	M-22EF02	E-6	3	C	2.5	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-01
	Valve Name:	**ESW TRN A FROM SERV AIR CMPSR CHECK VALVE**													
EFV0076	M-22EF01	B-6	3	C	2.5	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-01
	Valve Name:	**ESW TRN B FROM SERV AIR CMPSR CHECK VLV**													

Component Cooling Water (EG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EGHV0011	M-22EG01	F-8	3	B	1.5	GB	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TO CCW TRN A UPSTRM HV**													
EGHV0012	M-22EG01	C-8	3	B	1.5	GB	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TO CCW TRN B UPSTRM HV**													
EGHV0013	M-22EG01	F-7	3	B	1.5	GB	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TO CCW TRN A DNSTRM HV**													
EGHV0014	M-22EG01	C-7	3	B	1.5	GB	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	**ESW TO CCW TRN B DNSTRM HV**													
EGHV0015	M-22EG01	D-6	3	B	18.0	BF	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	M3			
	Valve Name:	**CCW TRN A SPLY/RTN ISO HV**													
EGHV0016	M-22EG01	D-6	3	B	18.0	BF	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	M3			
	Valve Name:	**CCW TRN B SPLY/RTN ISO HV**													
EGHV0053	M-22EG02	G-5	3	B	18.0	BF	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**CCW TRN A SPLY ISO HV**													
EGHV0054	M-22EG02	E-5	3	B	18.0	BF	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	**CCW TRN B SPLY ISO HV**													
EGHV0058	M-22EG03	H-5	2	A	12.0	GT	MO	Active	O	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	**CCW TO CTMT OUTER ISO HV**													

Component Cooling Water (EG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EGHV0059	M-22EG03	C-5	2	A	12.0	GT	MO	Active	O	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	CCW FROM CTMT OUTER ISO VLV													
EGHV0060	M-22EG03	B-5	2	A	12.0	GT	MO	Active	O	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	CCW FROM RCS IN CTMT ISO HV													
EGHV0061	M-22EG03	C-4	2	A	4.0	GT	MO	Active	O	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	CCW FROM RCP THRM BAR OUTER CTMT ISO													
EGHV0062	M-22EG03	B-4	2	A	4.0	GT	MO	Active	O	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	CCW FROM RCS IN CTMT ISO HV													
EGHV0069A	M-22EG03	F-8	3	B	14.0	BF	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CCW TO RW PROT A SPLY ISO HV													
EGHV0069B	M-22EG03	F-6	3	B	14.0	BF	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CCW FROM RW PROT A RTN ISO HV													
EGHV0070A	M-22EG03	F-8	3	B	14.0	BF	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CCW TO RW PROT B SPLY ISO HV													
EGHV0070B	M-22EG03	F-6	3	B	14.0	BF	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CCW FROM RW PROT B RTN ISO HV													
EGHV0071	M-22EG03	H-5	2	B	12.0	GT	MO	P	O	N/A	PIT	Y2			
	Valve Name:	CCW TO CTMT OUTER ISO VLV													

Component Cooling Water (EG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EGHV0101	M-22EG02	G-4	3	B	18.0	BF	MO	Active	C	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	CCW TO RHR HX A ISO													
EGHV0102	M-22EG02	C-4	3	B	18.0	BF	MO	Active	C	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	CCW TO RHR HX B ISO													
EGHV0126	M-22EG03	G-5	2	B	12.0	GT	MO	P	C	N/A	PIT	Y2			
	Valve Name:	CCW TO CTMT BYP VLV													
EGHV0127	M-22EG03	G-5	2	A	12.0	GT	MO	Passive	C	C	AT-01	App-J			
											PIT	Y2			
	Valve Name:	CCW TO CTMT BYP ISO HV													
EGHV0130	M-22EG03	B-5	2	A	12.0	GT	MO	Passive	LC	C	AT-01	App-J			
											PIT	Y2			
	Valve Name:	CCW FROM RCS CTMT EGHV0060 BYP ISO HV													
EGHV0131	M-22EG03	C-5	2	A	12.0	GT	MO	Passive	LC	C	AT-01	App-J			
											PIT	Y2			
	Valve Name:	CCW FROM CTMT EGHV0059 BYP ISO													
EGHV0132	M-22EG03	B-4	2	A	4.0	GT	MO	Passive	LC	C	AT-01	App-J			
											PIT	Y2			
	Valve Name:	CCW FROM RCS CTMT EGHV0062 BYP ISO HV													
EGHV0133	M-22EG03	C-5	2	A	4.0	GT	MO	Passive	LC	C	AT-01	App-J			
											PIT	Y2			
	Valve Name:	CCW FROM RCP THRM BAR EGHV0061 BYP ISO													
EGLV0001	M-22EG01	G-7	3	B	3.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	DI WTR TO CCW SRG TK A LV													
EGLV0002	M-22EG01	C-7	3	B	3.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	DI WTR TO CCW SRG TK B LV													
EGRV0009	M-22EG01	G-6	3	B	2.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CCW SRG TK A VENT CTRL VLV													

Component Cooling Water (EG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EGRV0010	M-22EG01	C-6	3	B	2.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CCW SRG TK B VENT CTRL VLV													
EGTV0029	M-22EG02	G-6	3	B	20.0	BF	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CCW HX A CCW BYP TV													
EGTV0030	M-22EG02	C-6	3	B	20.0	BF	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CCW HX B CCW BYP TV													
EGV0003	M-22EG01	G-3	3	C	20.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	CCW PMP A DISCH CHECK													
EGV0007	M-22EG01	E-3	3	C	20.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	CCW PMP C DISCH CHECK													
EGV0012	M-22EG01	D-3	3	C	20.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	CCW PMP B DISCH CHECK													
EGV0016	M-22EG01	C-3	3	C	20.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	M3			
	Valve Name:	CCW PMP D DISCH CHECK													
EGV0159	M-22EG01	G-6	3	C	2.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	CCW SRG TK A RELIEF													
EGV0170	M-22EG01	C-6	3	C	2.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	CCW SRG TK B RELIEF													
EGV0204	M-22EG03	H-4	2	AC	12.0	CK	SA	Active	SYS	C	AT-01	App-J			
											CCF	CM			TP-08
											CO	OP			TP-01
											COF	CM			TP-08
	Valve Name:	CCW TO RCS IN CTMT CHECK													

Component Cooling Water (EG)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EGV0305	M-22EG01	G-6	3	C	1.0	RV	SA	Active	C	O/C	RT	Y4			TP-13
	Valve Name:	**CCW SRG TK A VAC BRK**													
EGV0306	M-22EG01	C-6	3	C	1.0	RV	SA	Active	C	O/C	RT	Y4			TP-13
	Valve Name:	**CCW SRG TK B VAC BRK**													
EGV0447	M-22EG03	F-6	1	C	8	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-09
	Valve Name:	**CCW TO RW RETURN HEADER CHK VLV**													

Residual Heat Removal System (EJ)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EJ8708A	M-22EJ01	F-7	2	C	3.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**RHR PUMP A SUCT PRESS RLF**													
EJ8708B	M-22EJ01	C-7	2	C	3.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**RHR PUMP B SUCT PRESS RLF**													
EJ8730A	M-22EJ01	G-4	2	C	10.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	CS		CSJ-15	
	Valve Name:	**RHR HX A OUTLET CHECK VLV**													
EJ8730B	M-22EJ01	C-4	2	C	10.0	CK	SA	Active	SYS	O/C	CC	M3			
											CO	CS		CSJ-15	
	Valve Name:	**RHR HX B OUTLET CHECK VLV**													
EJ8841A	M-22EJ01	E-2	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COA	CM			TP-08
	Valve Name:	**RHR TRNS SIS HOT LEG LOOP 2 RECIRC SPLY HDR CHECK**													
EJ8841B	M-22EJ01	D-2	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COA	CM			TP-08
	Valve Name:	**RHR TRNS SIS HOT LEG LOOP 3 RECIRC SPLY HDR CHECK**													
EJ8842	M-22EJ01	D-3	2	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**RHR TRNS A & B SI SYS HOT LEG RECIRC SPLY HDR PRESS RELIEF**													
EJ8856A	M-22EJ01	G-3	2	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**RHR TRN A ACC INJ SPLY HDR RELIEF**													
EJ8856B	M-22EJ01	B-3	2	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**RHR TRN B ACC INJ SPLY HDR RELIEF**													
EJ8958A	M-22EJ01	F-6	2	C	14.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-11	
											CO	RR		RJ-11	
	Valve Name:	**RHR PUMP A SUCT FROM RWST CHECK VLV**													
EJ8958B	M-22EJ01	B-6	2	C	14.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-11	
											CO	RR		RJ-11	
	Valve Name:	**RHR PUMP B SUCT FROM RWST CHECK VLV**													

Residual Heat Removal System (EJ)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EJ8969A	M-22EJ01	H-4	2	C	8.0	CK	SA	Active	SYS	O	CC	RR			TP-01
											CCF	CM			TP-08
											CO	RR			
											COF	CM			TP-08
	Valve Name:	RHR TRN A CHARGING PUMPS SPLY HDR CHECK VLV													
EJ8969B	M-22EJ01	A-4	2	C	8.0	CK	SA	Active	SYS	O	CC	RR			TP-01
											CCF	CM			TP-08
											CO	RR			
											COF	CM			TP-08
	Valve Name:	RHR TRN B SAFETY INJ PUMPS SPLY HDR CHECK VLV													
EJFCV0610	M-22EJ01	H-6	2	B	3.0	GT	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	RHR PUMP A MINIMUM FLOW CTRL VLV													
EJFCV0611	M-22EJ01	A-5	2	B	3.0	GT	MO	Active	O	O/C	BTC	M3			
											BTO	M3			
											PIT	Y2			
	Valve Name:	RHR PUMP B MINIMUM FLOW CTRL VLV													
EJFCV0618	M-22EJ01	F-5	2	B	8.0	BF	AO	Passive	C	C	PIT	Y2			
	Valve Name:	RHR HX A BYP FLOW CTRL VLV													
EJFCV0619	M-22EJ01	B-5	2	B	8.0	BF	AO	Passive	C	C	PIT	Y2			
	Valve Name:	RHR HX B BYP FLOW CTRL VLV													
EJHCV0606	M-22EJ01	G-4	2	B	10.0	BF	AO	Passive	O	O	PIT	Y2			
	Valve Name:	RHR HX A OUTLET FLOW CTRL VLV													
EJHCV0607	M-22EJ01	C-4	2	B	10.0	BF	AO	Passive	O	O	PIT	Y2			
	Valve Name:	RHR HX B OUTLET FLOW CTRL VLV													
EJHCV8825	M-22EJ01	E-2	2	A	0.75	GB	AO	A	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RHR TRN A&B SIS HOT LEG RECIRC SIS TEST LINE ISO													

Residual Heat Removal System (EJ)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EJHCV8890A	M-22EJ01	F-2	2	A	0.75	GB	AO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RHR TRN A ACC INJ SIS TEST LINE ISO													
EJHCV8890B	M-22EJ01	C-2	2	A	0.75	GB	AO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RHR TRN B ACC INJ SIS TEST LINE ISO													
EJHV0014	M-22EJ01	H-5	2	B	1.0	GB	SO	Passive	C	C	PIT	Y2			
	Valve Name:	RHR PMP A MIN FLOW TO NUCLEAR SAMP SYS ISO													
EJHV0015	M-22EJ01	A-5	2	B	1.0	GB	SO	Passive	C	C	PIT	Y2			
	Valve Name:	RHR PMP B MIN FLOW TO NUCLEAR SAMP SYS ISO													
EJHV8701A	M-22EJ01	F-8	1	A	12.0	GT	MO	Active	C	C	AT-02	Y2			
											BTC	CS		CSJ-16	
											PIT	Y2			
	Valve Name:	RHR PUMP A SUCT ISO													
EJHV8701B	M-22EJ01	B-8	1	A	12.0	GT	MO	Active	C	C	AT-02	Y2			
											BTC	CS		CSJ-16	
											PIT	Y2			
	Valve Name:	RHR PUMP B SUCT ISO													
EJHV8716A	M-22EJ01	E-4	2	B	10.0	GT	MO	Active	O	O/C	BTC	CS		CSJ-17	
											BTO	CS		CSJ-17	
											PIT	Y2			
	Valve Name:	RHR TRN A SI SYS HOT LEG RECIRC ISO													
EJHV8716B	M-22EJ01	D-4	2	B	10.0	GT	MO	Active	O	O/C	BTC	CS		CSJ-17	
											BTO	CS		CSJ-17	
											PIT	Y2			
	Valve Name:	RHR TRN B SI SYS HOT LEG RECIRC ISO													
EJHV8804A	M-22EJ01	G-4	2	B	8.0	GT	MO	Active	C	O/C	BTO	CS		CSJ-18	TP-02
											PIT	Y2			
	Valve Name:	RHR TRN A CHARGING PUMPS SPLY ISO													

Residual Heat Removal System (EJ)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EJHV8804B	M-22EJ01	A-4	2	B	8.0	GT	MO	Active	C	O/C	BTO	CS		CSJ-18	TP-02
											PIT	Y2			
	Valve Name:	RHR TRN B SI PUMPS SPLY ISO													
EJHV8809A	M-22EJ01	G-3	2	B	10.0	GT	MO	Active	O	O/C	BTC	CS		CSJ-19	TP-02
											PIT	Y2			
	Valve Name:	RHR TRN A ACC INJ SPLY ISO													
EJHV8809B	M-22EJ01	C-3	2	B	10.0	GT	MO	Active	O	O/C	BTC	CS		CSJ-19	TP-02
											PIT	Y2			
	Valve Name:	RHR TRN B ACC INJ SPLY ISO													
EJHV8811A	M-22EJ01	E-7	2	B	14.0	GT	MO	Active	C	O/C	BTC	CS		CSJ-20	
											BTO	CS		CSJ-20	
											PIT	Y2			
	Valve Name:	CTMT RECIRC SUMP A TO RHR PUMP A SUCT ISO													
EJHV8811B	M-22EJ01	D-7	2	B	14.0	GT	MO	Active	C	O/C	BTC	CS		CSJ-20	
											BTO	CS		CSJ-20	
											PIT	Y2			
	Valve Name:	CTMT RECIRC SUMP B TO RHR PUMP B SUCT ISO													
EJHV8840	M-22EJ01	E-3	2	B	10.0	GT	MO	Active	C	O/C	BTO	CS		CSJ-21	TP-02
											PIT	Y2			
	Valve Name:	RHR TRAIN A & B SI SYS HOT LEG RECIRC ISO													

High Pressure Coolant Injection (EM)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EM8815	M-22EM02	D-3	1	AC	3	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CC	RR		RJ-12	
											CO	RR		RJ-12	
	Valve Name:	BORON INJ HDR OUT CHECK													
EM8851	M-22EM01	C-4	2	C	0.75	RV	SA	Active	C	O/C	RT	Y4			
	Valve Name:	SI PMPS DISCH TO COLD LEGS INJ PRESS RELIEF													
EM8853A	M-22EM01	F-5	2	C	0.75	RV	SA	Active	C	O/C	RT	Y4			
	Valve Name:	SI PMP A DISCH PRESS RELIEF													
EM8853B	M-22EM01	E-5	2	C	0.75	RV	SA	Active	C	O/C	RT	Y4			
	Valve Name:	SI PMP B DISCH PRESS RELIEF													
EM8858A	M-22EM01	E-7	2	C	0.75	RV	SA	Active	C	O/C	RT	Y4			
	Valve Name:	SI PMP A SUCT PRESS RELIEF													
EM8858B	M-22EM01	D-7	2	C	0.75	RV	SA	Active	C	O/C	RT	Y4			
	Valve Name:	SI PMP B SUCT PRESS RELIEF													
EM8922A	M-22EM01	E-5	2	C	4.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-13	
											CO	RR		RJ-13	
	Valve Name:	SI PMP A DISCH CHECK													
EM8922B	M-22EM01	D-5	2	C	4.0	CK	SA	Active	SYS	O/C	CC	RR		RJ-13	
											CO	RR		RJ-13	
	Valve Name:	SI PMP B DISCH CHECK													
EM8926A	M-22EM01	E-7	2	AC	8.0	CK	SA	Active	SYS	O/C	AT-03	Y2			
											CC	RR		RJ-14	
											CO	RR		RJ-14	
	Valve Name:	SI PMPS SUCT CHECK A													
EM8926B	M-22EM01	D-7	2	AC	8.0	CK	SA	Active	SYS	O/C	AT-03	Y2			
											CC	RR		RJ-14	
											CO	RR		RJ-14	
	Valve Name:	SI PMPS SUCT CHECK B													
EMHV8801A	M-22EM02	D-4	2	B	4	GT	MO	Active	C	O/C	BTO	M3			TP-02
											PIT	Y2			
	Valve Name:	BORON INJ HDR TRAIN A OUT TO COLD LEGS ISO													

High Pressure Coolant Injection (EM)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EMHV8801B	M-22EM02	D-4	2	B	4	GT	MO	Active	C	O/C	BTO	M3			TP-02
											PIT	Y2			
	Valve Name:	BORON INJ HDR TRAIN B OUT TO COLD LEGS ISO													
EMHV8802A	M-22EM01	E-4	2	B	4	GT	MO	Active	C	O/C	BTO	M3			TP-02
											PIT	Y2			
	Valve Name:	SI PMP A DISCH TO HOT LEG INJ ISO (3.0.3)													
EMHV8802B	M-22EM01	D-4	2	B	4	GT	MO	Active	C	O/C	BTO	M3			TP-02
											PIT	Y2			
	Valve Name:	SI PMP B DISCH TO HOT LEG INJ ISO (3.0.3)													
EMHV8803A	M-22EM02	C-7	2	B	4	GT	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	BORON INJ HDR SPLY FROM CCP A ISO													
EMHV8803B	M-22EM02	A-7	2	B	4	GT	MO	Active	C	O	BTO	M3			
											PIT	Y2			
	Valve Name:	BORON INJ HDR SPLY FROM CCP B ISO													
EMHV8807A	M-22EM01	G-7	2	B	6	GT	MO	Active	C	O/C	BTO	M3			TP-02
											PIT	Y2			
	Valve Name:	RHR HX A TO SI PMPS SUCT DNSTRM ISO VLV A													
EMHV8807B	M-22EM01	F-7	2	B	6	GT	MO	Active	C	O/C	BTO	M3			TP-02
											PIT	Y2			
	Valve Name:	RHR HX A TO SI PMPS SUCT DNSTRM ISO VLV B													
EMHV8814A	M-22EM01	B-6	2	A	1.5	GB	MO	Active	O	O/C	AT-03	Y2			
											BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	SI PMP A RECIRC TO RWST ISO													
EMHV8814B	M-22EM01	B-5	2	A	1.5	GB	MO	Active	O	O/C	AT-03	Y2			
											BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	SI PMP B RECIRC TO RWST ISO													
EMHV8821A	M-22EM01	E-4	2	B	4	GT	MO	Active	O	O/C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	SI PMP A DISCH TO COLD LEG INJ ISO													

High Pressure Coolant Injection (EM)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EMHV8821B	M-22EM01	D-4	2	B	4	GT	MO	Active	O	O/C	BTC	M3			TP-02
											PIT	Y2			
	Valve Name:	**SI PMP B DISCH TO COLD LEG INJ ISO**													
EMHV8823	M-22EM01	C-4	2	B	0.75	GB	AO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SI/ACC INJ TEST LINE ISO HV**													
EMHV8824	M-22EM01	D-3	2	B	0.75	GB	AO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SI PMP B DISCH TEST LINE ISO HV**													
EMHV8835	M-22EM01	B-4	2	B	4.0	GT	MO	Active	O	O/C	BTC	CS		CSJ-22	TP-02
											PIT	Y2			
	Valve Name:	**SI PMPS DISCH TO COLD LEG INJ ISO (3.0.3)**													
EMHV8843	M-22EM02	C-4	2	B	0.75	GB	AO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**BORON INJ HDR OUT UPSTRM TEST LINE ISO HV**													
EMHV8871	M-22EM01	G-5	2	A	0.75	GB	AO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SI SYS IN CTMT TEST LINE ISO HV**													
EMHV8881	M-22EM01	G-4	2	B	0.75	GB	AO	Active	C	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**SI PMP A DISCH TEST LINE ISO HV**													
EMHV8882	M-22EM02	C-3	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	**BORON INJ HDR OUT DNSTRM TEST LINE ISO HV**													
EMHV8888	M-22EM01	F-6	2	A	1.0	GB	AO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**ACC TKS FILL LINE FROM SI PMPS ISO**													

High Pressure Coolant Injection (EM)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EMHV8889A	M-22EM01	G-2	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI PMP B LOOP 1 HOT LEG TEST LINE ISO NV													
EMHV8889B	M-22EM01	G-3	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI PMP A LOOP 2 HOT LEG TEST LINE ISO HV													
EMHV8889C	M-22EM01	G-2	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI PMP A LOOP 3 HOT LEG TEST LINE ISO HV													
EMHV8889D	M-22EM01	G-2	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI PMP B LOOP 4 HOT LEG TEST LINE ISO HV													
EMHV8923A	M-22EM01	E-7	2	B	6.0	GT	MO	Passive	O	O	PIT	Y2			
	Valve Name:	RWST TO SI PMP A SUCT ISO HV (3.0.3)													
EMHV8923B	M-22EM01	D-7	2	B	6.0	GT	MO	Passive	O	O	PIT	Y2			
	Valve Name:	RWST TO SI PMP B SUCT ISO HV													
EMHV8924	M-22EM01	F-8	2	B	6	GT	MO	Passive	O	O	PIT	Y2			TP-06
	Valve Name:	RHR HX A TO SI PMPS SUCT UP STRM ISO (3.0.3)													
EMHV8964	M-22EM01	G-6	2	A	0.75	GB	AO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	SI SYS OUT CTMT TEST LINE ISO													
EMV0001	M-22EM01	F-3	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	SI PMP A DISCH TO HOT LEG LOOP 2 UPSTRM CHECK													
EMV0002	M-22EM01	E-3	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	SI PMP A DISCH TO HOT LEG LOOP 3 UPSTRM CHECK													

High Pressure Coolant Injection (EM)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EMV0003	M-22EM01	D-3	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**SI PMP B DISCH TO HOT LEG LOOP 1 UPSTRM CHECK**													
EMV0004	M-22EM01	C-3	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COA	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**SI PMP B DISCH TO HOT LEG LOOP 4 UPSTRM CHECK**													
EMV0005	M-22EM01	A-6	2	C	1.5	CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	**SI PMP A DISCH TO RWST CHECK**													
EMV0006	M-22EM01	F-6	2	AC	1	CK	SA	Active	SYS	C	AT-01	App-J			
											CC	RR		RJ-15	
											CO	OP			TP-01
	Valve Name:	**SI PMPS ACC TKS FILL LINE CHECK**													
EMV0007	M-22EM01	A-5	2	C	1.5	CK	SA	Active	SYS	O	CC	M3			TP-01
											CO	M3			
	Valve Name:	**SI PMP B DISCH TO RWST CHECK**													

Containment Spray (EN)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ENHV0001	M-22EN01	G-7	2	B	12.0	GT	MO	Active	C	O/C	BTC	CS		CSJ-23	TP-02
											BTO	CS		CSJ-23	TP-02
											PIT	Y2			
	Valve Name:	CTMT RECIRC SMP TO CTMT SPRY PMP A HV													
ENHV0006	M-22EN01	G-4	2	B	10.0	GT	MO	Active	C	O/C	BTO	M3			TP-02
											PIT	Y2			
	Valve Name:	CTMT SPRY PMP A DISCH HV													
ENHV0007	M-22EN01	B-7	2	B	12.0	GT	MO	Active	C	O/C	BTC	CS		CSJ-23	
											BTO	CS		CSJ-23	
											PIT	Y2			
	Valve Name:	CTMT RECIRC SMP TO CTMT SPRY PMP B HV													
ENHV0012	M-22EN01	B-4	2	B	10.0	GT	MO	Active	C	O/C	BTO	M3			TP-02
											PIT	Y2			
	Valve Name:	CTMT SPRY PMP B DISCH HV													
ENV0002	M-22EN01	G-7	2	C	12.0	CK	SA	Active	SYS	O	CCD	CM			TP-08
											COD	CM			TP-08
	Valve Name:	CTMT SPRY ISO VLV ENCAP A OUT CHECK													
ENV0003	M-22EN01	G-7	2	C	12.0	CK	SA	Active	SYS	O/C	CCD	CM			TP-08
											COD	CM			TP-08
	Valve Name:	RWST TO CTMT SPRY PMP A CHECK													
ENV0004	M-22EN01	G-6	2	C	10.0	CK	SA	Active	SYS	O	CCD	CM			TP-08
											COD	CM			TP-08
	Valve Name:	CTMT SPRY PMP A DISCH CHECK													
ENV0008	M-22EN01	B-7	2	C	12.0	CK	SA	Active	SYS	O	CCD	CM			TP-08
											COD	CM			TP-08
	Valve Name:	CTMT SPRY ISO VLV ENCAP B OUT CHECK													
ENV0009	M-22EN01	B-7	2	C	12.0	CK	SA	Active	SYS	O/C	CCD	CM			TP-08
											COD	CM			TP-08
	Valve Name:	RWST TO CTMT SPRAY PMP B CHECK													
ENV0010	M-22EN01	B-5	2	C	10.0	CK	SA	Active	SYS	O	CCD	CM			TP-08
											COD	CM			TP-08
	Valve Name:	CTMT SPRY PMP B DISCH CHECK													

Containment Spray (EN)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
ENV0013	M-22EN01	G-4	2	C	10.0	CK	SA	Active	SYS	O/C	CCD	CM			TP-08
											COD	CM			TP-08
	Valve Name:	**CTMT SPRY PMP A DISCH IN CTMT CHECK**													
ENV0017	M-22EN01	B-4	2	C	10.0	CK	SA	Active	SYS	O/C	CCD	CM			TP-08
											COD	CM			TP-08
	Valve Name:	**CTMT SPRY PMP B DISCH IN CTMT CHECK**													

Accumulator Safety Injection (EP)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EP8818A	M-22EP01	G-3	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCD	CM			TP-08
											CCF	CM			TP-08
											CO	CM			TP-11
											COD	CM			TP-08
	Valve Name:	RHR PMPS TO RCS COLD LEG LOOP 1 CHECK													
EP8818B	M-22EP01	F-3	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	RHR PMPS TO RCS COLD LEG LOOP 2 CHECK													
EP8818C	M-22EP01	D-3	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	RHR PMPS TO RCS COLD LEG LOOP 3 CHECK													
EP8818D	M-22EP01	C-3	1	AC	6.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCD	CM			TP-08
											CCF	CM			TP-08
											CO	CM			TP-11
											COD	CM			TP-08
	Valve Name:	RHR PMPS TO RCS COLD LEG LOOP 4 CHECK													
EP8855A	M-22EP01	H-7	2	C	1.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	SI ACC TK A PRESS RELIEF													
EP8855B	M-22EP01	E-7	2	C	1.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	SI ACC TK B PRESS RELIEF													
EP8855C	M-22EP01	D-7	2	C	1.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	SI ACC TK C PRESS RELIEF													
EP8855D	M-22EP01	C-7	2	C	1.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	SI ACC TK D PRESS RELIEF													

Accumulator Safety Injection (EP)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EP8956A	M-22EP01	G-4	1	AC	10.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	SI ACC TK A OUT UPSTRM CHECK													
EP8956B	M-22EP01	E-4	1	AC	10.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	SI ACC TK B OUT UPSTRM CHECK													
EP8956C	M-22EP01	C-4	1	AC	10.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	SI ACC TK C OUT UPSTRM CHECK													
EP8956D	M-22EP01	B-4	1	AC	10.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											CO	CM			TP-11
											COF	CM			TP-08
	Valve Name:	SI ACC TK D OUT UPSTRM CHECK													
EPHV8808A	M-22EP01	G-5	2	B	10.0	GT	MO	Active	O	O/C	BTC	CS		CSJ-24	TP-02
											PIT	Y2			
	Valve Name:	SI ACC TK A OUT ISO													
EPHV8808B	M-22EP01	E-5	2	B	10.0	GT	MO	Passive	O	O	PIT	Y2			
	Valve Name:	SI ACC TK B OUT ISO													
EPHV8808C	M-22EP01	C-5	2	B	10.0	GT	MO	Passive	O	O	PIT	Y2			
	Valve Name:	SI ACC TK C OUT ISO													
EPHV8808D	M-22EP01	B-5	2	B	10.0	GT	MO	Active	O	O/C	BTC	CS		CSJ-24	TP-02
											PIT	Y2			
	Valve Name:	SI ACC TK D OUT ISO													
EPHV8875A	M-22EP01	G-6	2	B	1.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC TK A N2 SPLY HV													

Accumulator Safety Injection (EP)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EPHV8875B	M-22EP01	F-6	2	B	1.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC TK B N2 SPLY HV													
EPHV8875C	M-22EP01	D-6	2	B	1.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC TK C N2 SPLY HV													
EPHV8875D	M-22EP01	B-6	2	B	1.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC TK D N2 SPLY HV													
EPHV8877A	M-22EP01	F-4	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC A OUT UPSTRM CHECK TEST LINE ISO													
EPHV8877B	M-22EP01	E-4	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC B OUT UPSTRM CHECK TEST LINE ISO													
EPHV8877C	M-22EP01	C-4	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC C OUT UPSTRM CHECK TEST LINE ISO													
EPHV8877D	M-22EP01	A-4	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC D OUT UPSTRM CHECK TEST LINE ISO													
EPHV8878A	M-22EP01	G-5	2	B	1.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC TK A FILL LINE ISO HV													
EPHV8878B	M-22EP01	E-5	2	B	1.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC TK B FILL LINE ISO HV													
EPHV8878C	M-22EP01	D-5	2	B	1.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC TK C FILL LINE ISO HV													
EPHV8878D	M-22EP01	B-5	2	B	1.0	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC TK D FILL LINE ISO HV													
EPHV8879A	M-22EP01	G-4	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC A OUT DNSTRM CHECK TEST LINE ISO													
EPHV8879B	M-22EP01	E-4	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC B OUT DNSTRM CHECK TEST LINE ISO													
EPHV8879C	M-22EP01	D-4	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC C OUT DNSTRM CHECK TEST LINE ISO													
EPHV8879D	M-22EP01	C-2	2	B	0.75	GB	AO	Passive	C	C	PIT	Y2			
	Valve Name:	SI ACC D OUT DNSTRM CHECK TEST LINE ISO													

Accumulator Safety Injection (EP)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EPHV8880	M-22EP01	A-3	2	A	1.0	GB	AO	A	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	SI ACC TKS N2 SPLY HV													
EPHV8950A	M-22EP01	H-8	2	B	1.0	GB	SO	Active	C	O	BTO	CS		CSJ-25	
											PIT	Y2			
	Valve Name:	SI ACC TK A VENT HV													
EPHV8950B	M-22EP01	F-8	2	B	1.0	GB	SO	Active	C	O	BTO	CS		CSJ-25	
											PIT	Y2			
	Valve Name:	SI ACC TK B VENT HV													
EPHV8950C	M-22EP01	F-7	2	B	1.0	GB	SO	Active	C	O	BTO	CS		CSJ-25	
											PIT	Y2			
	Valve Name:	SI ACC TK B VENT HV													
EPHV8950D	M-22EP01	D-8	2	B	1.0	GB	SO	Active	C	O	BTO	CS		CSJ-25	
											PIT	Y2			
	Valve Name:	SI ACC TK C VENT HV													
EPHV8950E	M-22EP01	D-7	2	B	1.0	GB	SO	Active	C	O	BTO	CS		CSJ-25	
											PIT	Y2			
	Valve Name:	SI ACC TK C VENT HV													
EPHV8950F	M-22EP01	C-8	2	B	1.0	GB	SO	Active	C	O	BTO	CS		CSJ-25	
											PIT	Y2			
	Valve Name:	SI ACC TK D VENT HV													
EPV0010	M-22EP01	G-3	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	SI PMPS TO RCS COLD LEG LOOP 1 CHECK													
EPV0020	M-22EP01	F-3	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	SI PMPS TO RCS COLD LEG LOOP 2 CHECK													

Accumulator Safety Injection (EP)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
EPV0030	M-22EP01	D-3	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**SI PMPS TO RCS COLD LEG LOOP 3 CHECK**													
EPV0040	M-22EP01	C-3	1	AC	2.0	CK	SA	Active	SYS	O/C	AT-02	Y2			
											CCF	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**SI PMPS TO RCS COLD LEG LOOP 4 CHECK**													
EPV0046	M-22EP01	A-5	2	AC	1.0	CK	SA	Active	SYS	C	AT-01	App-J			
											CCF	CM			TP-08
											CO	OP			TP-01
											COF	CM			TP-08
	Valve Name:	**SI ACC TKS N2 SPLY CHECK**													

AFW Pump Turbine (FC)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
FCFV0310	M-22FC02	D-7	3	B	1.0	GB	AO	Active	O	C	BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**AFP TURB STMLINE DRN FLOW VLV**													
FCHV0312	M-22FC02	F-5	3	B	4.0	GB	MO	Active	C	O	BTO	M3			TP-05
	Valve Name:	**AFP TURB MECH TRIP/THROT HV**													
FCV0001	M-22FC02	G-6	2	C	4.0	CK	SA	Active	SYS	O/C	CCD	CM			TP-08
											COD	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**MS LOOP 2 TO AFP TURB UPSTRM CHECK**													
FCV0002	M-22FC02	G-6	2	C	4.0	CK	SA	Active	SYS	O/C	CCD	CM			TP-08
											COD	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**MS LOOP 3 TO AFP TURB UPSTRM CHECK**													
FCV0024	M-22FC02	G-6	2	C	4.0	CK	SA	Active	SYS	O/C	CCD	CM			TP-08
											COD	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**MS LOOP 2 TO AFP TURB DNSTRM CHECK**													
FCV0025	M-22FC02	G-6	2	C	4.0	CK	SA	Active	SYS	O/C	CCD	CM			TP-08
											COD	CM			TP-08
											COF	CM			TP-08
	Valve Name:	**MS LOOP 3 TO AFP TURB DNSTRM CHECK**													

Control Building HVAC (GK)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
SGK04AV1	N/A		3	C	1.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	CTRL RM AIR CNDR UNIT A REFRIG PRESS RELIEF													
SGK04BV1	N/A		3	C	1.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	CTRL RM AIR CNDR UNIT B REFRIG PRESS RELIEF													
SGK05AV1	N/A		3	C	1.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	ELEC EQUIP AIR CNDR UNIT A REFRIG PRESS RELIEF													
SGK05BV1	N/A		3	C	1.0	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	ELEC EQUIP AIR CNDR UNIT B REFRIG PRESS RELIEF													

Containment Hydrogen Control (GS)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
GSHV0003	M-22GS01	E-6	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**H2 ANALYZER B SPLY OUTER CTMT ISO HV**													
GSHV0004	M-22GS01	E-5	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**H2 ANLZ B SPLY IN CTMT ISO HV**													
GSHV0005	M-22GS01	D-5	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**H2 ANALYZER B SPLY INNER CTMT ISO HV**													
GSHV0008	M-22GS01	B-6	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**H2 ANALYZER B RTN OUTER CTMT ISO HV**													
GSHV0009	M-22GS01	B-6	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**H2 ANLZ B RTN IN CTMT ISO HV**													

Containment Hydrogen Control (GS)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
GSHV0012	M-22GS01	E-4	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	H2 ANALYZER A SPLY OUTER CTMT ISO HV													
GSHV0013	M-22GS01	E-5	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	H2 ANLZ A SPLY IN CTMT ISO HV													
GSHV0014	M-22GS01	D-5	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	H2 ANLZ A SPLY IN CTMT ISO HV													
GSHV0017	M-22GS01	B-4	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	H2 ANALYZER A RTN OUTER CTMT ISO HV													
GSHV0018	M-22GS01	B-5	2	A	1.0	GT	SO	Active	C	O/C	AT-01	App-J			
											BTC	M3			
											BTO	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	H2 ANLZ A RTN IN CTMT ISO HV													
GSHV0020	M-22GS01	F-5	2	A	6.0	BF	MO	Passive	C	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	H2 PURGE IN CTMT ISO HV													

Containment Hydrogen Control (GS)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
GSHV0021	M-22GS01	F-4	2	A	6.0	BF	MO	Passive	C	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	H2 PURGE OUTER CTMT ISO HV													
GSHV0031	M-22GS01	D-4	2	A	1.0	GT	SO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT ATMS MON SPLY IN CTMT ISO HV													
GSHV0032	M-22GS01	D-3	2	A	1.0	GT	SO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT ATMS MON SPLY OUTER CTMT ISO HV													
GSHV0033	M-22GS01	C-4	2	A	1.0	GT	SO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT ATMS MON RTN OUTER CTMT ISO HV													
GSHV0034	M-22GS01	C-4	2	A	1.0	GT	SO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT ATMS MON RTN IN CTMT ISO HV													
GSHV0036	M-22GS01	D-6	2	A	1.0	GT	SO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT ATMS MON SPLY IN CTMT ISO HV													
GSHV0037	M-22GS01	D-7	2	A	1.0	GT	SO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT ATMS MON SPLY OUTER CTMT ISO HV													

Containment Hydrogen Control (GS)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
GSHV0038	M-22GS01	C-6	2	A	1.0	GT	SO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**CTMT ATMS MON RTN OUTER CTMT ISO HV**													
GSHV0039	M-22GS01	C-6	2	A	1.0	GT	SO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**CTMT ATMS MON RTN IN CTMT ISO HV**													

Containment Purge (GT)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
GTHZ0004	M-22GT01	D-4	2	A	18.0	BF	AO	Active	SYS	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT MINI PURGE AIR SPLY OUTER CTMT DMPR													
GTHZ0005	M-22GT01	A-5	2	A	18.0	BF	AO	Active	SYS	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT MINI PURGE AIR SPLY INNER CTMT UPSTRM DMPR													
GTHZ0006	M-22GT01	C-4	2	A	36.0	BF	AO	Active	C	C	AT-01	App-J			
											BTC	RR		RJ-16	
											FC	RR		RJ-16	TP-04
											PIT	Y2			
	Valve Name:	CTMT S/D PURGE AIR SPLY OUTER CTMT DMPR													
GTHZ0007	M-22GT01	C-5	2	A	36.0	BF	AO	Active	C	C	AT-01	App-J			
											BTC	RR		RJ-16	
											FC	RR		RJ-16	TP-04
											PIT	Y2			
	Valve Name:	CTMT S/D PURGE AIR SPLY INNER CTMT DMPR													
GTHZ0008	M-22GT01	C-6	2	A	36.0	BF	AO	Active	C	C	AT-01	App-J			
											BTC	RR		RJ-16	
											FC	RR		RJ-16	TP-04
											PIT	Y2			
	Valve Name:	CTMT S/D PURGE EXH INNER CTMT DMPR													
GTHZ0009	M-22GT01	C-7	2	A	36.0	BF	AO	Active	C	C	AT-01	App-J			
											BTC	RR		RJ-16	
											FC	RR		RJ-16	TP-04
											PIT	Y2			
	Valve Name:	CTMT S/D PURGE EXH OUTER CTMT DMPR													
GTHZ0011	M-22GT01	A-6	2	A	18.0	BF	AO	Active	SYS	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	CTMT MINI PURGE EXH INNER CTMT DNSTRM DMPR													

Containment Purge (GT)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
GTHZ0012	M-22GT01	A-7	2	A	18.0	BF	AO	Active	SYS	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			

Valve Name: **CTMT MINI PURGE EXH OUTER CTMT DMPR**

Liquid Radwaste (HB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
HBHV7126	M-22HB01	G-6	2	A	0.75	DI	AO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RCDT TO GRW CMPSR IN CTMT HV													
HBHV7136	M-22HB01	F-3	2	A	3.0	DI	AO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RCDT HX OUT HDR OUTER CTMT HV													
HBHV7150	M-22HB01	G-6	2	A	0.75	DI	AO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RCDT OUT TO GRW SYS OUTER CTMT HV													
HBHV7176	M-22HB01	F-3	2	A	3.0	DI	AO	Active	O	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	RCDT HX OUT HDR IN CTMT ISO HV													

Decontamination (HD)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
HDV0016	M-22HD01	B-7	2	A	2.0	GB	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	**RX HEAD DECON AUX STM SPLY OUTER CTMT ISO**													
HDV0017	M-22HD01	B-7	2	A	2.0	GB	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	**RX HEAD DCON AUX STEAM SPLY IN CTMT ISO**													

Emergency Fuel Oil (JE)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
JEV0085	M-22JE01	H-5	3	C	2.0	CK	SA	Active	SYS	O	CO	M3			TP-05
	Valve Name:	**EMERG F.O. DAY TK A IN CHECK**													
JEV0086	M-22JE01	D-5	3	C	2.0	CK	SA	Active	SYS	O	CO	M3			TP-05
	Valve Name:	**EMERG F.O. DAY TK B IN CHECK**													

Compressed Air (KA)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
KAFV0029	M-22KA01	B-1	2	A	2.0	GB	AO	Active	O	C	AT-01	App-J			
											BTC	CS		CSJ-26	
											FC	CS		CSJ-26	TP-04
											PIT	Y2			
	Valve Name:	RX BLD INST AIR SPLY FLOW CTRL VLV													
KAV0039	M-22KA02	D-6	2	AC	4.0	CK	SA	Passive	C	C	AT-01	App-J			
	Valve Name:	RX BLD SERV AIR HDR SPLY CHECK													
KAV0118	M-22KA02	D-6	2	A	4.0	GB	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	RX BLD SERV AIR HDR SPLY OUTER CTMT ISO													
KAV0204	M-22KA01	B-1	2	AC	1.5	CK	SA	Active	SYS	C	AT-01	App-J			
											CCD	CM			TP-08
											CCF	CM			TP-08
											COD	CM			TP-08
											COF	CM			TP-09
	Valve Name:	RX BLD INST AIR SPLY CHECK													
KAV0648	M-22KA05	G-6	3	AC	0.75	CK	SA	Active	SYS	C	AT-03	Y2			
											CC	M3			
											CO	OP			TP-01
	Valve Name:	SG A AFW CTRL/MS ATMS RELIEF VLVS N2 SPLY ACC IN													
KAV0649	M-22KA05	F-5	3	AC	0.75	CK	SA	Active	SYS	C	AT-03	Y2			
											CC	M3			
											CO	OP			TP-01
	Valve Name:	SG C AFW CTRL/MS ATMS RELIEF VLVS N2 SPLY ACC IN													
KAV0650	M-22KA05	D-6	3	AC	0.75	CK	SA	Active	SYS	C	AT-03	Y2			
											CC	M3			
											CO	OP			TP-01
	Valve Name:	SG B AFW CTRL/MS ATMS RELIEF VLVS N2 SPLY ACC IN													
KAV0651	M-22KA05	B-5	3	AC	0.75	CK	SA	Active	SYS	C	AT-03	Y2			
											CC	M3			
											CO	OP			TP-01
	Valve Name:	SG D AFW CTRL/MS ATMS RELIEF VLVS N2 SPLY ACC IN													
KAV0703	M-22KA05	H-7	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	SG A AFW CTRL/MS RLF VLV N2 SPLY ACC PRESS RELIEF													

Compressed Air (KA)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
KAV0704	M-22KA05	F-6	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**SG C AFW CTRL/MS RLF VLV N2 SPLY ACC PRESS RELIEF**													
KAV0705	M-22KA05	D-7	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**SG B AFW CTRL/MS RLF VLV N2 SPLY ACC PRESS RELIEF**													
KAV0706	M-22KA05	B-6	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**SG D AFW CTRL/MS RLF VLV N2 SPLY ACC PRESS RELIEF**													
KAV0710	M-22KA05	H-8	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**SG A AFW CTRL/MS RLF VLV N2 SPLY ACC OUT RELIEF**													
KAV0711	M-22KA05	F-7	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**SG C AFW STRL/MS RLF VLV N2 SPLY ACC OUT RELIEF**													
KAV0712	M-22KA05	D-8	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**SG B AFW CTRL/MS RLF VLV N2 SPLY ACC OUT RELIEF**													
KAV0713	M-22KA05	B-7	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	**SG D AFW CTRL/MS RLF VLV N2 SPLY ACC OUT RELIEF**													

Breathing Air for Tasks (KB)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
KBV0001	M-22KB01	A-1	2	A	2.0	GB	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	**BRTH AIR SYS IN CTMT ISO**													
KBV0002	M-22KB01	A-2	2	A	2.0	GB	MA	Passive	LC	C	AT-01	App-J			
	Valve Name:	**BRTH AIR SYS OUT CTMT ISO**													

Fire Protection (KC)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
KCHV0253	M-22KC02	B-6	2	A	4.0	GT	MO	Passive	C	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	**F-PROT LOOP TO RX BLD OUTER CTMT DNSTRM ISO**													
KCV0478	M-22KC02	B-6	2	AC	4.0	CK	SA	Active	SYS	C	AT-01	App-J			
											CCF	CM			TP-08
											CO	RR			TP-01
											COF	CM			TP-08
	Valve Name:	**FIRE PROT LOOP TO RX BLD IN CTMT CHECK**													

Standby Diesel Generator (KJ)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
KJPV0001A	M-22KJ02	F-3	NC	B	0.375	3W	SO	Active	C	O	BTO	M3			TP-05
	Valve Name:	DG A STARTING AIR SPLY PRESS CTRL VLV A													
KJPV0001B	M-22KJ02	F-3	NC	B	0.375	3W	SO	Active	C	O	BTO	M3			TP-05
	Valve Name:	DG A STARTING AIR SPLY PRESS CTRL VLV B													
KJPV0008	M-22KJ02	F-4	NC	B		3W	SO	Passive	DE	C	BTC	M3			TP-05
	Valve Name:	DG A FUEL RACK AIR SPLY PRESS CTRL VLV													
KJPV0101A	M-22KJ05	F-3	NC	B	0.375	3W	SO	Active	C	O	BTO	M3			TP-05
	Valve Name:	DG B STARTING AIR SPLY PRESS CTRL VLV A													
KJPV0101B	M-22KJ05	F-3	NC	B	0.375	3W	SO	Active	C	O	BTO	M3			TP-05
	Valve Name:	DG B STARTING AIR SPLY PRESS CTRL VLV B													
KJPV0108	M-22KJ05	F-4	NC	B		3W	SO	Passive	DE	C	BTC	M3			TP-05
	Valve Name:	DG B FUEL RACK AIR SPLY PRESS CTRL VLV													
KJV0711A	M-22KJ02	C-2	NC	C	0.75	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-01
	Valve Name:	DG STARTING AIR TK A SPLY CHECK													
KJV0711B	M-22KJ05	B-2	NC	C	0.75	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-01
	Valve Name:	DG STARTING AIR TK C SPLY CHECK													
KJV0712A	M-22KJ02	D-5	NC	C	0.75	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-01
	Valve Name:	DG STARTING AIR TK B SPLY CHECK													
KJV0712B	M-22KJ05	D-5	NC	C	0.75	CK	SA	Active	SYS	C	CC	M3			
											CO	OP			TP-01
	Valve Name:	DG STARTING AIR TK D SPLY CHECK													
KJV0716A	M-22KJ02	C-2	NC	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	DG STARTING AIR TK A PRESS RELIEF													
KJV0716B	M-22KJ05	C-2	NC	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	DG STARTING AIR TR C PRESS RELIEF													
KJV0717A	M-22KJ02	C-4	NC	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	DG STARTING AIR TK B PRESS RELIEF													
KJV0717B	M-22KJ05	C-4	NC	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	DG STARTING AIR TK D PRESS RELIEF													

Standby Diesel Generator (KJ)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
KJV0757A	M-22KJ02	G-2	NC	C	1.5	CK	SA	Active	SYS	O	CO	M3			TP-05
	Valve Name:	DG A ENGINE DR F/O PMP DISCH CHECK VLV													
KJV0757B	M-22KJ05	G-2	NC	C	1.5	CK	SA	Active	SYS	O	CO	M3			TP-05
	Valve Name:	DG B ENGINE DR F/O PMP DISCH CHECK VLV													
KJV0771A	M-22KJ01	G-3	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	DG A JACKET WTR HTR OUT PRESS RELIEF													
KJV0771B	M-22KJ04	G-3	3	C	0.75	RV	SA	Active	C	O/C	RT	Y10			
	Valve Name:	DG B JACKET WTR HTR OUT PRESS RELIEF													
KJV0773A	M-22KJ01	F-3	NC	C	1.5	CK	SA	Active	SYS	O	CO	M3			TP-05
	Valve Name:	DG A JACKET WTR HTR OUT CHECK													
KJV0773B	M-22KJ04	F-3	NC	C	1.5	CK	SA	Active	SYS	O	CO	M3			TP-05
	Valve Name:	DG B JACKET WTR HTR OUT CHECK													
KJV0779A	M-22KJ01	F-6	NC	C	5.0	CK	SA	N/A	SYS	O	CO	M3			TP-05
	Valve Name:	DG A ENGINE DRIVEN JACKET WTR PMP DISCH CHECK													
KJV0779B	M-22KJ04	F-6	NC	C	5.0	CK	SA	N/A	SYS	O	CO	M3			TP-05
	Valve Name:	DG B ENGINE DRIVEN JACKET WTR PMP DISCH CHECK													
KJV0818A	M-22KJ03	C-3	NC	C	2.0	CK	SA	Active	SYS	O/C	CC	M3			TP-05
											CO	M3			TP-05
	Valve Name:	DG A LUBE OIL FILTER OUT CHECK													
KJV0818B	M-22KJ06	C-3	NC	C	2.0	CK	SA	Active	SYS	O/C	CC	M3			TP-05
											CO	M3			TP-05
	Valve Name:	DG B LUBE OIL FILTER OUT CHECK													

Rx Bldg and Hot Machine Shop Floor and Equip Drain (LF)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
LFFV0095	M-22LF09	F-2	2	A	6.0	GT	MO	Active	O	C	AT-01	App-J			
											BTC	M3			
											PIT	Y2			
	Valve Name:	**CTMT NORM SMP PMPS DISCH HDR CTMT FV**													
LFFV0096	M-22LF09	F-2	2	A	6.0	GB	AO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**CTMT NORM SMP PMPS DISCH HDR AUX BLD FCV**													
LFHV0105	M-22LF03	C-5	3	B	6.0	GT	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	**DRW SMPS DISCH HDR DNSTRM HV**													
LFHV0106	M-22LF03	C-5	3	B	6.0	GT	MO	Active	O	C	BTC	M3			
											PIT	Y2			
	Valve Name:	**DRW SMPS DISCH HDR UPSTRM HV**													

Nuclear Sampling (SJ)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
SJHV0005	M-22SJ04	F-6	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	PASS HOT LEG 1 SAMP IN CTMT DNSTRM ISO HV													
SJHV0006	M-22SJ04	F-6	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	PASS HOT LEG 1 SAMP OUT CTMT ISO TRN A HV													
SJHV0012	M-22SJ01	F-7	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	PZR VAPOR SAMP IN CTMT ISO HV													
SJHV0013	M-22SJ01	E-7	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	PZR VAPOR SAMP OUT CTMT ISO HV													
SJHV0018	M-22SJ01	G-3	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	ACC SAMP IN CTMT ISO HV													
SJHV0019	M-22SJ01	F-3	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	ACC SAMP OUT CTMT ISO HV													
SJHV0127	M-22SJ04	F-6	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	PASS HOT LEG 1 SAMP OUT CTMT ISO TRN B HV													

Nuclear Sampling (SJ)

Valve Location	P&ID	P&ID Coor.	Safety Class	Cat.	Size	Valve Type	Act. Type	Active / Passive	Normal Position	Safety Position	Test Type	Test Freq.	Relief Request	Deferred Just.	Tech. Pos.
SJHV0128	M-22SJ04	H-6	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**PASS PZR & RCS SAMP IN CTMT ISO HV**													
SJHV0129	M-22SJ04	H-5	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**PASS PZR & RCS SAMP OUT CTMT ISO TRN B HV**													
SJHV0130	M-22SJ04	G-5	2	A	1.0	GB	SO	Active	C	C	AT-01	App-J			
											BTC	M3			
											FC	M3			TP-04
											PIT	Y2			
	Valve Name:	**PASS PZR & RCS SAMP OUT CTMT ISO TRN A HV**													