INDIANA MICHIGAN POWER

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AEP:NRC:5055-14 10 CFR 50.55a

December 28, 2005

Docket Nos.: 50-315 50-316

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Stop O-P1-17 Washington, DC 20555-0001

1.

Donald C. Cook Nuclear Plant Units 1 and 2 FOURTH 10-YEAR INTERVAL PUMP AND VALVE INSERVICE TESTING PROGRAM

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References:

Letter from Gail H. Marcus, Nuclear Regulatory Commission (NRC), to E. E. Fitzpatrick, Indiana Michigan Power Company (I&M), "Evaluation of Third 10-Year Interval for the Pump and Valve Inservice Testing Program for Donald C. Cook Nuclear Plant, Units 1 and 2 (TAC Nos. M95721, M95722, M95890, and M95891)," dated May 27, 1997.

2. Letter from Cynthia A. Carpenter, NRC, to Robert P. Powers, I&M, "Donald C. Cook (D. C. Cook) Nuclear Plant, Units 1 and 2 – Evaluation of Relief Requests for the Pump and Valve Inservice Testing Program (TAC Nos. M99494 and M99499)," dated December 29, 1998.

Pursuant to 10 CFR 50.55a(f)(5)(i), Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, has revised the CNP pump and valve inservice testing program for the fourth 10-year test interval that begins July 1, 2006. A copy of the program, which includes I&M's relief requests is attached to this letter.

The relief requests are submitted under either the provisions of 10 CFR 50.55a(a)(3)(i) as an alternative that provides an acceptable level of quality and safety or the provisions of 10 CFR 50.55a(f)(6)(i) because complying with the code requirements is impractical. The applicable 10 CFR 50.55a provision is identified in each relief request. Relief requests REL-001 and REL-PP1 were previously approved for CNPs third 10-year test interval (References 1 and 2).

U. S. Nuclear Regulatory Commission Page 2 AEP:NRC:5055-14

I&M requests approval of the relief requests prior to the start of the fourth 10-year test interval, which will begin July 1, 2006.

This letter contains no new commitments. Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Supervisor, at (269) 466-2649.

Sincerely,

Daniel P. Fadel

Engineering Vice President

Attachment: Pump and Valve Inservice Test Program for Donald C. Cook Nuclear Plant Fourth Ten Year Interval

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> Revision 4 November 10, 2005

TABLE OF CONTENTS

SECTION

NUMBER OF PAGES

Cover Page	1
Program Information	19
Code Edition	
General Information	
Pump Information	
Valve Information	
Relief Requests	
REL-001	2
REL-002	2
REL-003	1
REL-PP1	2
REL-PP2	2
REL-PP3	2
REL-PP4	1
Cold Shutdown Justifications (CSJ-001 to CSJ-039)	
CSJ-001	1
CSJ-002	1
CSJ-003	1
CSJ-004	1
CSJ-005	1
CSJ-006	1
CSJ-007	1
CSJ-008	1
CSJ-009	1
CSJ-010	1
CSJ-011	1
CSJ-012	1
CSJ-013	1
C5J-014 C51 015	1
	1
CSJ-010 CSI 017	1
CS1-017	1
CSJ-010 CSL010	1
CSL020	1
CS1-020	- 1
CS 1.022	1
CSL023	· 1
CSI-025	1
CSI-025	1
CSI-026	1
CSI-027	- 1
CSJ-027	1
CSJ-029	2
CSJ-030	1
CS L031	- 1

<u>.</u>...

Pump and Valve Inservice Testing Program for Donald C. Cook Nuclear Plant Fourth Ten Year Interval Revision 4 November 10, 2005

SECTION

NUMBER OF PAGES

. .

<u>.</u>,

CSJ-032		1
CSJ-033		1
CSJ-034		1
CSJ-035		. 2
CSJ-036		1
CSJ-037		1
CSJ-038		2
CSJ-039		1
Refueling Outage Justifications (ROJ-001 to	o ROJ-041)	
ROJ-001		1
ROJ-002		1
ROJ-003		1
ROJ-004		1
ROJ-005		1
ROJ-006		1
ROJ-007		1
ROJ-008		1
ROJ-009		1
ROJ-010		1
ROJ-011		2
ROJ-012		1
ROJ-013		1
ROJ-014		2
ROJ-015		1
ROJ-016		1
ROJ-017		1
ROJ-018		1
ROJ-019		1
ROJ-020		2
ROJ-021		1
ROJ-022		1
ROJ-023		2
ROJ-024		1
ROJ-025		2
ROJ-026		2
ROJ-027		1
ROJ-028		1
ROJ-029		1
ROJ-030		2
RUJ-031		2
KUJ-032		2
ROJ-033	·	2
ROJ-034		2
RUJ-035 DOI 036		2
RUJ-030 DOI 027		I
KUJ-UJ / DA I A29		2
KUJ-UJO DA 1.030		1
RUJ-UJ7 DA 1.010		1
		3
KUJ-V41		2

Pump and Valve Inservice Testing Program

for Donald C. Cook Nuclear Plant Fourth Ten Year Interval

Revision 4 November 10, 2005

SECTION

NUMBER OF PAGES

Pump Program Tables 10 Valve Program Tables Auxiliary Feedwater 8 **Compressed Air** 6 **Component Cooling Water** 19 **Control Room Ventilation** 2 **Containment Spray** 6 **Containment Ventilation** 6 **Chemical and Volume Control** 11 **Containment Waste Disposal** 4 **Diesel Fuel Oil** 1 **Diesel Jacket Water** 2 **Diesel Lube Oil** 3 **Diesel Starting Air** 8 **Essential Service Water** 15 4 Feedwater 2 Ice Condenser Refrigeration Primary and Makeup Water 1212 BR 12/29/05 Main Steam **Non-Essential Service Water** 21 Nitrogen Blanketing 3 Nuclear Sampling 8 Post Accident Sampling 16 **Reactor Coolant System** 9 8 **Residual Heat Removal** Safety Injection 20 Spent Fuel Pool Cooling and Cleanup 2 Weld Channel Pressurization 1



Revision 4

Code Edition

ASME OM Code-2001 Edition with Addenda through 2003

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Revision 4

General Information

1.1 Basis for the Program

The Donald C. Cook Nuclear Plant (DC Cook) Pump and Valve Inservice Testing (IST) Program is required by 10CFR50.55a(f), "Inservice testing requirements".

The following guidance documents were used in developing this revision to the IST Program:

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

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

Standard Review Plan 3.9.6, "Inservice Testing of Pumps and Valves",

Updated Final Safety Analysis Report,

Technical Specifications,

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

1.2 The Fourth Ten Year Interval

This program document is applicable for the Fourth 10-year inspection interval that commences on July 1, 2006 and concludes on June 30, 2016.

1.3 Applicable ASME OM Code

Inservice Testing of ASME Class 1, 2, and 3 pumps and valves is performed in accordance with ASME OM Code 2001 Edition with Addenda through 2003, except as allowed by 10CFR50 or where specific written relief has been granted by the NRC pursuant to 10CFR50.55a(f)(6)(i) for examinations and tests determined to be impracticable. Provided guidance of NUREG 1482, Revision 1, is followed, the proposed alternative examinations or tests may be implemented prior to receiving written NRC approval if so stated in the guidance document.

ASME OM Code, Subsections ISTA and ISTB shall be utilized for the inservice testing of pumps. Subsections ISTA and ISTC shall be utilized for the inservice testing of valves. Subsection ISTA and Appendix I shall be utilized for the inservice testing of pressure relief devices. Appendix II of OMb-2003, Check Valve Condition Monitoring, shall be utilized for certain check valves within the IST Program scope. The OM Code of Record for the Fourth 10-Year Interval has been approved for use in 10CFR50.55a(b)(3).

ASME Code Cases that have been approved for use by the NRC per Regulatory Guide 1.192 and are adopted for use at D.C. Cook will be identified in the IST Program. The following Code Cases shall be used during the Fourth 10-Year Interval IST Program implementation with all conditions, as applicable.

OMN-1, "Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants" (upon approval of Relief Request REL-003)

OMN-6, "Alternative Rules for Digital Instruments" (upon approval of Relief Request REL-PP4)

1.4 Program Scope

ASME Class 1, 2, or 3 pumps, which are provided with an emergency power source and perform a function to bring the plant to the safe shutdown condition, maintain the plant in the safe shutdown condition, or mitigate the consequences of an accident are included in the IST Program. ASME Class 1, 2, or 3 valves which perform

2 OF 19



Revision 4

these functions and safety or relief valves which provide over pressure protection for systems or portions of systems which are required to perform these functions, are also included. The safe shutdown condition at DC Cook is hot shutdown. The term "accident" refers not only to the design basis accidents analyzed in Section XIV of the UFSAR, but to a broad range of possible adverse events which could affect plant safety. Additional accidents and operational transients, and the equipment required to mitigate the possible consequences thereof, are identified in the UFSAR.

The scope of the IST regulations is limited to ASME Class 1, 2, and 3 components in accordance with 10CFR50.55a(f). Non-Code Class components whose functions are essential to the safety or reliability of the plant may also be included in the DC Cook IST Program as Augmented components. These Augmented components are tested to the same accepted standards for component testing to the extent practicable. Since Non-Code components are outside the scope of the Federal Regulations, NRC approval of requests for relief is not required if the OM Standards cannot be met. However, deviations from the Standards are documented and justified in the program.

1.5 Skid Mounted Components and Component Subassemblies

The Code class piping systems at a plant may include skid-mounted components or component subassemblies such as valves in diesel air-start subassemblies, diesel skid-mounted fuel oil pump(s) and valves, steam admission and trip throttle valves for auxiliary feedwater pump turbine drivers, steam traps, and air supply system check valves and solenoid-operated valves for air operated valves. If these components are identified as ASME Code Class 1, 2, or 3, in the UFSAR, they are subject to IST. If these components are not identified as ASME Code Class 1, 2, or 3, in the UFSAR (or the UFSAR indicates that they are maintained as Code class, but are not required to be Code class), they are not subject to IST in accordance with 10 CFR 50.55a. However, these components may be subject to periodic testing in accordance with 10 CFR 50, Appendix A and Appendix B. (Reference NUREG-1482, Revision 1, Section 3.4)

The classification of components as skid mounted includes components actually mounted on the skid and also includes components that are not mounted on the skid, but that function much the same as skid-mounted components where testing the major component can be considered adequate to test the function of the associated pumps or valves. (Reference NUREG-1482, Revision 1, Section 3.4)

As defined in ISTA-2000 and specifically addressed in Subsections ISTB-1200(c) and ISTC-1200, skid-mounted components which are subject to IST, the NRC Staff has determined that the testing of the major component is an acceptable means for verifying the operational readiness of the skid-mounted and component subassemblies. This is acceptable for both Code class components and non-Code class components tested and tracked by the IST Program. The components, which are tested as skid-mounted, are identified in the IST Program.

1.6 Testing Frequency

The required test frequency for pumps and valves is established in the OM Code. The actual test frequency is identified in the pump and valve test tables. A band of +25% of the test interval may be applied to the test schedule to provide necessary operational flexibility. The 25% extension can only be applied to those frequencies actually listed in Technical Specification 5.5.6 a. and are listed below:

Quarterly or every 3 months - At least once per 92 days Yearly or annually - At least once per 366 days Biennially or every 2 years - At least once per 731 days

1.7 IST Basis Document

The Inservice Testing (IST) program basis document defines component safety functions and test requirements for the IST Program. Component safety functions are defined in accordance with regulatory requirements (10CFR50.55a, ASME Standards and Codes etc.), licensing basis documents (UFSAR, Technical Specifications etc.) and Nuclear Regulatory Commission guidance (Generic Letters, NUREG-1482, Rev. 1 etc.). Testing

3 OF 19

2-



Revision 4

requirements were determined using the ASME OM Code-2001 Edition with Addenda through 2003.

<u>.</u>



Revision 4

Pump Information

2.1 Description

The Inservice Test Plan Pump Table identifies the pumps included in the DC Cook IST Program, applicable Group, the inservice test parameters to be measured, the test frequency, test type, references to pump relief requests, and other pertinent information. The Fourth Interval Code of Record, OM Code-2001 with Addenda through 2003, has incorporated significant changes to those requirements of the Third Interval Code of Record OMa-1988, Part 6. The OM Code requires the grouping of pumps as either Group A or Group B with different quarterly test requirements imposed on each Group. Group A pumps are defined as pumps that operate continuously or routinely during normal operation, cold shutdown, or refueling operations. Group B pumps are defined as pumps in standby systems that are not operated routinely except for testing. The OM Code has also adopted the biennial Comprehensive pump test which has more stringent acceptance criteria for the hydraulic parameters as well as more stringent accuracy requirements for pressure instrumentation.

2.2 Specific Testing Requirements

This Section defines requirements for Group A, Group B, and Comprehensive inservice tests, and preservice tests. When a Group A test is required, a Comprehensive test may be substituted. When a Group B test is required a Group A or Comprehensive test may be substituted. A preservice test may be substituted for any inservice test. The parameters to be measured are specified in Table ISTB-3000-1.

2.2.1 Test Duration

For the Group A and the Comprehensive test, after pump conditions are as stable as the system permits, each pump shall be run for at least 2 minutes. At the end of this time at least one measurement or determination of each of the guantities required shall be made and recorded.

For the Group B test, after pump conditions are stable, at least one measurement or determination of each of the quantities required shall be made and recorded.

2.2.2 Preservice Testing (Centrifugal and Vertical Line Shaft)

In systems where resistance can be varied, flow rate and differential pressure shall be measured at a minimum of five points. If practicable, these points shall be from pump minimum flow to at least pump design flow. A pump curve shall be established based on the measured points. At least one point shall be designated as the reference point(s). Data taken at the reference point will be used to compare the results of inservice tests. A pump curve need not be established for pumps in systems where resistance cannot be varied. Vibration measurements are only required to be taken at the reference point(s).

2.2.3 Preservice Testing (Positive Displacement)

For positive displacement pumps, reference values shall be taken at or near pump design pressure for the required parameters. Vibration measurements are only required to be taken at the reference point(s).

2.2.4 Group A Inservice Test and Comprehensive Test

Group A and comprehensive tests shall be conducted with the pump operating at a specified reference point. The test parameters shall be determined or measured as follows:

The pump shall be operated at nominal motor speed for constant speed drives or at speed adjusted to the reference point (± 1%) for variable speed drives.

Note: For positive displacement pumps discharge pressure shall be substituted for differential pressure.

The resistance of the system shall be varied until the flow rate equals the reference point. The differential pressure

<u>.</u> -



Revision 4

shall then be determined and compared to its reference value. Alternatively, the flow rate shall be varied until the differential pressure equals the reference point and the flow rate determined and compared to the reference flow rate value.

Where it is not practical to vary system resistance, flow rate and pressure shall be determined and compared to their respective reference values.

Vibration (displacement or velocity) shall be determined and compared to the reference value. Vibration measurements shall be broad band (unfiltered). If velocity measurements are used, they shall be peak. If displacements amplitudes are used, they shall be peak-to-peak.

All deviations from the reference values shall be compared with the ranges of Tables ISTB-5100-1, ISTB-5200-1, or ISTB-5300-1, as applicable and corrective action taken as specified in ISTB-6200. Vibration measurements shall be compared to both the relative and absolute criteria shown in the alert and required action ranges of Tables ISTB-5100-1, ISTB-5200-1, or ISTB-5300-1, as applicable. For example, if vibration exceeds either 6Vr or 0.7 in/sec (1.7 cm/sec) the pump is in the required action range.

2.2.5 Group B Inservice Test

Group B tests shall be conducted with the pump operating at a specified reference point. The test parameters shall be determined or measured as follows:

The pump shall be operated at nominal motor speed for constant speed drives or at speed adjusted to the reference point (± 1%) for variable speed drives.

Note: For positive displacement pumps discharge pressure shall be substituted for differential pressure.

The differential pressure or flow rate shall be determined and compared to its reference value.

System resistance may be varied as necessary to achieve the reference point.

All deviations from the reference values shall be compared with the ranges of Tables ISTB-5100-1, ISTB-5200-1, or ISTB-5300-1, as applicable, and corrective action taken as specified in ISTB-6200.

2.3 Allowable Ranges of Test Parameters

The allowable ranges, specified in the OM Code, used for pressure, flow, and vibration measurements except as provided in relief requests are identified in the following Tables:

Table ISTB-5100-1 - Centrifugal Pump Test Acceptance Criteria

Table ISTB-5200-1 - Vertical Line Shaft and Centrifugal Pump Test Acceptance Criteria

Table ISTB-5300-1 - Positive Displacement Pump (Except Reciprocating) Test Acceptance Criteria

Table ISTB-5300-2 - Reciprocating Positive Displacement Pump Test Acceptance Criteria (Not Applicable at D.C. COOK)

In some cases, the performance of a pump may be adequate to fulfill its safety function even though there may be a measurement that falls outside the allowable range. Should this situation occur, an operability determination may be performed, in accordance with Generic Letter 91-18, NUREG-1482, Revision 1, Section 5.6, and DC Cook administrative procedures.

2.4 Testing of Non-Code Components

The Diesel Fuel Oil Transfer (DFOT) and Diesel Jacket Water (DJW) pumps are non-Code class augmented components. These pumps are tested to the same OM Code requirements as Code class components to the extent practicable. Both set of pumps fall within the group'B' classification. The DJW pumps will receive a group

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Revision 4

'B' and comprehensive test. The DFOT pumps, however, will be tested like a group 'A' pump (i.e.: current testing will continue - vibration data taken quarterly, etc.) in lieu of perfroming a group 'B' and comprehensive test. This is noted in the Pump tables. (Reference NUREG 1482 Rev. 1, section 2.2.3)

2.5 Instrumentation

Instrumentation used in the IST Program will conform to the requirements of the OM Code except where specific relief is requested. Two or more instruments or components working together to provide a single output are considered an instrument loop. The allowable inaccuracy of an instrument loop is based on the square root of the sum of the squares of the inaccuracies of each instrument in the loop. The instrument accuracy requirements refer to the calibration of the instrument. The Code does not require consideration of other factors which could contribute to measurement error such as orifice wear, instrument location, etc. (Ref. Code Interpretation 95-7) However, excessive measurement error would be detected by erratic or unacceptable test results which would require corrective action. If test results are due to out of calibration instruments, the instruments may be recalibrated and the test rerun. If it is determined that unacceptable test results are due to other instrument problems, corrective action shall be by repair or replacement of the instrument system.

The Code requires that flow rate be measured using a rate or quantity meter installed in or on the pump test circuit. Differential pressure may be measured using a dP gauge or transmitter, or may be determined by the difference between the pressure at the inlet and outlet of the pump. Per NUREG-1482, Revision 1, Section 5.5.3, suction pressure may be calculated based on inlet tank or bay level.

Vibration instrumentation shall be calibrated over the required frequency response range of one third minimum pump speed to at least 1000 HZ except where specific relief is requested.

Pursuant to NUREG-1482, Revision 1, Section 5.5, D.C. Cook shall adopt Code Case OMN-6, "Alternative Rules for Digital Instruments"; whereas, digital instruments may be selected such that the reference value does not exceed 90% of the calibrated range of the instrument in lieu of the OM Code required 70%. The use of this Code Case is dependent upon approval of Relief Request REL-PP4.

The installed plant discharge pressure instruments (0 - 60 psi gauges) will be used for testing the Diesel Fuel Oil Transfer (DFOT) pumps. The discharge pressure is set to 15 psi. The Code range requirements would require a 0 - 45 psi gauge be used. The installed instruments do not comply with these range requirements. The DFOT pumps are non-Code class augmented components. As augmented components requesting relief is not required when certain Code requirements are not met. (Reference NUREG-1482 Rev. 1, section 2.2.3)

2.6 Reference Values

Reference values are determined from the results of the preservice or first inservice test. Reference values will only be established when the pump is known to be operating properly.

When any reference value may have been affected by repair, replacement, or routine servicing of a pump, a new reference value or set of reference values shall be determined, or the previous values(s) reconfirmed by a comprehensive or Group A test run prior to declaring the pump operable.

Pumps may be tested at more than one point of pump operation. Additional reference values must be established for these points in accordance with ISTB-3310, ISTB-3320, or ISTB-6200(c). Whenever an additional set of reference values is established, the reasons for doing so shall be documented in the record of tests.

Reference values shall be established in a region(s) of relatively stable pump flow. Reference values shall be established within \pm 20% of pump design flow rate for the Comprehensive pump test. Reference values shall be established within \pm 20% of pump design flow rate for the Group A and Group B pump tests, if practicable. If not practicable, the reference point flow rate shall be established at the highest practical flow rate.

The Code requires that reference values be established at points of pump operation that can be readily duplicated

7 OF 19

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Pump and Valve Inservice Testing Program for Donald C. Cook Nuclear Plant, Fourth Ten Year Interval

Revision 4

during subsequent tests. It may not be possible, or it may be extremely difficult, to vary system resistance such that the reference conditions are duplicated exactly. NUREG-1482, Revision 1, Section 5.3, allows variation in the setting of a fixed reference value of either differential pressure or flow rate, provided the combination of this variation and the associated instrument error does not exceed ± 2 percent for Group A and Group B tests. For Preservice and Comprehensive tests, the allowable total tolerance is ± ½ percent for pressure and differential pressure, ± 2 percent for flow. For a tolerance greater than previously stated (which may be necessary depending on the precision of the instrument), a corresponding adjustment to acceptance criteria may be made to compensate for the uncertainty, or an evaluation would be performed and documented justifying a greater tolerance. For tolerances greater than those previously discussed, a relief request may be required. In using this guidance, the variance and the method for establishing the variance must be documented in the IST program documents or implementing procedures.

2.7 Minimum Operability Limits (MOL)

To ensure that the IST acceptance criteria protects the design assumptions, the calculations that make design assumptions for the IST tested pumps must be reviewed to determine the pump performance assumed in that calculation. That performance assumed in the calculation of record, by definition, is the minimum operability limit (MOL). If a pump's MOL is more limiting than the Code defined acceptance criteria this pump is considered "Design Limited."

Applicable testing of design limited pumps must also consider applicable errors, such as diesel Generator variances and test instrument accuracy. To ensure that the IST acceptance criterion protects the minimum operability limits, the acceptance criteria must be adjusted to account for these errors.

The Code allows a ± 2 percent instrument accuracy for the hydraulic readings measured to satisfy the IST pump testing requirements for Group A and Group B pump tests and $\pm \frac{1}{2}$ percent instrument accuracy for the pressure value for Preservice and Comprehensive tests. A single inaccuracy is derived from these inaccuracies by the square root of the sum of the squares methodology, because the instruments are independent and random devices. This method of combining errors is accepted industry practice, endorsed in many standards, including RG 1.105, Instrument Setpoints for Safety-Related Systems.

The error corrected MOL will be used as the lowest differential pressure acceptance criteria for design limited pumps to ensure these minimum operability limits are not violated by Code defined acceptance criteria. The Code defined acceptance criteria will be used as the lower differential pressure acceptance criteria for those pumps that are not design limited.

2.8 Test Deviations Within the Required Action Range

OM Code, Paragraph ISTB 6200(b) allows that "if the measured test parameter values fall within the required action range of Table ISTB 5100-1, Table ISTB 5200-1, Table ISTB 5300-1 or Table ISTB 5300-2, as applicable, the pump shall be declared inoperable until either the cause of the deviation has been determined and the condition is corrected, or an analysis of the pump is performed and new reference values are established in accordance with paragraph ISTB 6200(c)." This paragraph allows that: "In cases where the pump's test parameters are within either the alert or required action ranges of Table ISTB 5100-1, Table ISTB 5200-1, Table ISTB 5300-2, as applicable, and the pump's continued use at the changed values is supported by an analysis, a new set of reference values may be established. This analysis shall include verification of the pump's operational readiness. The analysis shall include both a pump level and system level evaluation of operational readiness, the cause of the change in pump performance, and an evaluation of all trends indicated by available data. The results of this analysis shall be documented in the record of tests."

To use an analysis as described above, one must know the cause of the degradation, the rate of degradation, and the minimum allowed pump performance that will still satisfy the safety function of the pump in question.

Returning a pump to service by analysis should be done cautiously, rather than regularly, when evaluating pumps in the Required Action range. Repeated application of analysis could lead to "stair stepping" the Code action

8 OF 19

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Revision 4

range limit downward to the safety limit of the pump. The available margin of pumps will be the determining factor in whether or not continued operation is acceptable. The analysis, which should include detailed justification and discussion of changes in the pump reference values, must be documented in accordance with Code requirements. If this provision is used for vibration, the absolute limits continue to apply, as these are not dependent on reference values. Additionally, caution must be taken when using the alternative for vibration, as there are no defined safety margins related to pump vibration.

2.9 Inservice Test Plan Pump Tables

The following notations are used in the pump summary tables:

SYSTEM: The plant system in which the pump is located.

COMPONENT: The pump component identification code.

CODE CLASS: The ASME Inservice Inspection (ISI) classification of the component. Augmented components are classified "0".

P&ID (Coord): The associated piping and instrumentation drawing number and the drawing coordinate location for the pump.

INSERVICE

TEST PARAMETERS: Refers to the test parameters to be measured or observed. The symbols used for designating which parameters will be measured or observed are as follows:

DP - Differential Pressure Disc. Press - Discharge Pressure Flow - Pump Flow rate Speed - Rotative Speed VIB - Vibration Amplitude

FREQ: The frequency of testing each pump. The letter "Q" denotes quarterly testing; the notation "2A" denotes biennially.

CODE DEV: This column references any applicable relief request(s).

COMMENTS: This column is used to identify the test types based on the pump group as defined in ISTB-2000 and will also contain any other component related information.

9 OF 19



Revision 4

Valve Information

3.1 Description

The Inservice Test Plan Valve Tables identify the valves included in the DC Cook IST Program, the inservice test parameters to be measured, the test requirements, the test frequencies, references to cold shutdown justifications, refueling outage justifications, valve relief requests, and other pertinent information.

3.2 Cold Shutdown Testing

For those valves designated to be tested at cold shutdown, testing will commence as soon as practicable after the plant reaches a stable cold shutdown condition as defined in Technical Specifications, but no later than 48 hours after reaching cold shutdown. Valves tested at a cold shutdown frequency may also include valves tested while decreasing power to cold shutdown or while increasing power to steady state power operation. If an outage is sufficiently long enough to allow testing of all valves required to be tested during cold shutdown, then the 48 hour requirement need not apply if all the valves are tested during the outage. Valve testing will not necessarily be performed more often than once every three months, however, during extended periods of cold shutdown, testing will be performed quarterly. Completion of all valve testing during a cold shutdown outage will not be required if plant conditions preclude testing of specific valves or if the cold shutdown duration is insufficient to complete all testing provided testing commenced within 48 hours of reaching cold shutdown. Testing not completed before startup will be completed during subsequent cold shutdown outages in sequence such that scheduled testing does not omit or favor certain valves or groups of valves. All valves tested during cold shutdown shall also be tested before startup from refueling outages, unless testing has been completed within the previous 92 days. If an outage lasts beyond 92 days, all cold shutdown testing shall be completed within the last 92 days of the shutdown. The deferral of quarterly valve testing to a cold shutdown frequency shall be documented in a cold shutdown justification (CSJ). Additional restrictions may be applied as stated in specific cold shutdown justifications or relief requests. (Reference NUREG-1482, Revision 1, 3.1.1)

3.3 Refueling Outage Testing

Refueling Outage refers to a scheduled refueling outage at the end of an operating cycle. This definition should not be confused with the Technical Specification definition of "Refuel" (Mode 6). During a mid-cycle outage the plant may be placed in Mode 6, however this does not constitute a refueling outage for the purpose of inservice testing. The deferral of quarterly valve testing to a refueling outage frequency shall be documented in a refueling outage justification (ROJ). Additional restrictions may be applied as stated in specific refueling outage justifications or relief requests. (Reference NUREG-1482, Revision 1, section 3.1.1). Pursuant to ISTC-3510, power-operated relief valves shall be exercise tested once per fuel cycle. No deferred testing justification is included in the program for this testing frequency.

3.4 Reference Values

Stroke time reference values are determined from the results of preservice or inservice tests. Reference values will be re-established following valve replacement. Reference values will only be established when the valve is known to be operating properly.

When any reference value may have been affected by repair or routine servicing of a valve or its control system, a new reference value shall be determined, or the previous values(s) reconfirmed by an inservice test run prior to declaring the valve operable.

Reference values are required for each direction of valve travel requiring stroke time testing as listed in the Inservice Testing Plan Valve Tables (i.e., ST-O and/or ST-C).

Valves may be tested at more than one mode of plant operation or system operating conditions (i.e., static or dynamic). Additional reference values must be established for these points in accordance with OM Code requirements. Whenever an additional reference value is established, the reasons for doing so shall be

10 OF 19

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Revision 4

documented in the record of tests.

3.5 Stroke Time Acceptance Criteria

The following criteria have been used in developing reference values of full-stroke time for power operated values (POVs):

Review of valve's design specification and/or manufacturer's test stroke times.

Review of system response time requirements (Improved Technical Specification, UFSAR, etc.)

Valve's historical stroke time values at various system conditions.

OM Code-2001 with Addenda through 2003, Paragraphs ISTC-5114, ISTC-5122, ISTC-5132, ISTC-5142 and ISTC-5152 are used for acceptability of stroke time test results. Should the plus or minus criteria be less restrictive than a required system or component response time from any source, the more restrictive time shall be used as the limiting value.

Any abnormality or erratic action shall be recorded, and an evaluation shall be made regarding need for corrective action.

3.6 Limiting Values of Full-Stroke Times

Where stroke time measurement of power-operated valves is required, the limiting values of full-stroke times are based on the valve's reference or average stroke time when it is known to be in good condition and operating properly. Improved Technical Specifications, Technical Requirements Manual or safety analysis stroke time limits will be used in lieu of the calculated limiting values of full-stroke time if they are more restrictive.

In addition, stroke time acceptance criteria are assigned to each valve in accordance with the OM Code based on valve actuator type and reference stroke times.

3.7 Code Case OMN-1

ASME OM Code Case OMN-1,"Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants," allows the use of MOV diagnostic testing as an alternative to stroke time testing and position indication verification for certain motor operated valves. Use of this Code Case is authorized by Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code." This Regulatory Guide lists ASME OM Code Cases determined acceptable for use in IST Programs by the NRC. The Regulatory Guide is incorporated by reference in the Code of Federal Regulations 10CFR50.55a(b). The Code Case is listed in Table 2 of this Regulatory Guide as a conditionally approved Code Case. A conditionally approved Code Case may be used without request to the NRC provided it is used with any identified limitations or modifications. The stipulations listed in Table 2 include the following:

(1) The adequacy of the diagnostic test interval for each motor-operated valve (MOV) must be evaluated and adjusted as necessary but not later than 5 years or three refueling outages (which ever is longer) from initial implementation of OMN-1.

(2) When extending exercise test intervals for high risk MOVs beyond a quarterly frequency, ensure that the potential increase of Core Damage Frequency (CDF) and risk associated with the extension is small and consistent with the intent of the Commissions Safety Goal Policy Statement.

(3) When applying risk insights, MOVs must be categorized according to their safety significance using the methodology described in Code Case OMN-3 or use other MOV risk ranking methodologies accepted by the NRC on a plant specific or industry-wide basis.

This Code Case will be used, with the associated stipulations, as an alternative to stroke time and position indication testing required by OM Code, paragraphs ISTC-5120 and ISTC-3700, respectively. Valve exercising frequency deferrals will be documented in cold shutdown or refueling outage justifications as applicable. This allows identification of which valves can be exercised during plant operation and those restricted to cycling during

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Revision 4

cold shutdowns or refueling outages. The valve tables will be annotated with "OMN-1" in the comments column as appropriate.

3.8 Fail-safe Testing

Required fail-safe mechanisms are tested by observing the operation of the valve actuator upon loss of actuating power. A valve may fail open or closed by design on a loss of actuating power; however, fail-safe testing is performed only if the valve is required to fail to a safety position to mitigate the consequences of an accident, bring the plant to the safe shutdown condition, or maintain the plant in the safe shutdown condition. If a valve is repositioned by the fail-safe position actuator by operation of the control switch, as is the case with most air operated valves, the quarterly exercise test satisfies the fail-safe test requirement and no separate test need be performed.

3.9 Valve Position Indication Verification

The valve position indicators on active and passive valves are verified at least once every two years. Per NUREG-1482, Revision 1, Section 4.2.8, only the position indicators at the remote location used for exercising and stroke timing a valve need be verified for those valves equipped with remote position indicators in multiple locations.

3.10 Instrumentation Requirements

Instrumentation accuracy shall be considered when establishing valve test acceptance criteria. (ISTC-3800)

3.11 Active/Passive Valves

For the purpose of IST, active valves are defined as those which may be required to change obturator position to accomplish their required safety function(s).

Passive valves are defined as those which are not required to change obturator position to accomplish any required safety function(s). Valves that are locked, sealed, or de-energized in their required position are passive. Valves that are not periodically repositioned and whose normal position is the required safety position are considered passive. Valves that are only occasionally repositioned from their safety position to support the performance of surveillance procedures or infrequent operations, and are administratively controlled while out of their safety position, are also considered passive.

A valve may be classified as having both a passive and active function if repositioning of the valve to its normal position would not be required after the valve has traveled to its active safety position. The valve would be considered as performing a passive safety function in it's normal position.

3.12 Power Operated Relief Valve (PORV) Testing

DC Cook has PORVs contained in separate systems that are included within the scope of the IST Program. These valves serve as the Main Steam PORVs and the Pressurizer PORVs. Historically, the Main Steam PORVs were tested on a guarterly frequency while the Pressurizer PORVs were tested on a cold shutdown frequency.

ISTC-2000, "Supplemental Definitions," define a power operated relief valve as a valve that can perform a pressure relieving function and is remotely actuated from a pressure sensing device or a control switch. A power operated relief valve is not capacity certified under ASME Section III overpressure protection requirements.

Pursuant to ISTC-3510, "Exercise Test Frequency," power operated relief valves, as previously defined, shall be exercise tested once per fuel cycle. DC Cook's current fuel cycles are of an 18 month duration. In addition to the frequency requirements specified in ISTC-3510, the specific testing requirements stated in ISTC-5100 must also be considered.



Revision 4

ISTC-5100 contains six subparagraphs ISTC-5110, 5111, 5112, 5113, 5114 and 5115.

ISTC-5110, "Power Operated Relief Valves," specifies that power operated relief valves shall meet the requirements of ISTC-5100 for the specific Category B valve type and ISTC-5240 for Category C valves. ISTC-5240 specifies that safety and relief valves shall meet the inservice test requirements of Mandatory Appendix I.

ISTC-5111, "Valve Testing Requirements," states that a) testing shall be performed in the following sequence or concurrently. If testing in the following sequence is impractical, it may be performed out of sequence, and a justification shall be documented in the record of tests for each test or test plan:

1) leakage testing;

stroke testing;

3) position indication testing

b) The pressure sensing device shall be calibrated in accordance with the Owner's quality assurance program.

ISTC-5112, "Leak Testing," states that seat tightness of the PORV shall be verified by leak testing in accordance with the requirements of Mandatory Appendix I.

ISTC-5113, "Valve Stroke Testing," provides the guidelines for stroke testing power operated relief valves and is considered applicable to the Category B valve type.

ISTC-5114, "Stroke Time Acceptance Criteria," provides acceptance criteria to be applied when stroke timing power operated relief valves. The criteria is based on the valve's reference stroke time. This criteria is applicable to the Category B valve type.

ISTC-5115, "Corrective Action," provided the guidelines to be applied when a power operated relief valve fails to meet the applicable acceptance criteria. The corrective action guidelines are applicable to both seat leakage testing and stroke testing.

It is DC Cook's position that the leakage testing requirements as well as the sequential test requirements imposed on power operated relief valves, by ISTC-5111 and ISTC-5112, are applicable only if the valves are of the Category C type. These requirements are consistent with those presented in Mandatory Appendix I, which provides the guidelines for testing pressure relief devices. The power operated relief valves at DC Cook are of the Category B valve type where seat leakage in the closed position is inconsequential for fulfillment of the required function(s). Furthermore, this is consistent with the NRC recommendations provided in NUREG-1482, Rev.1, Section 4.2.10, "Pressurizer Power Operated Relief Valve Inservice Testing." Additionally, the NRC recommendations provided in NUREG-1482, Rev.1 are consistent with earlier guidelines provided in NRC Generic Letter 90-06, "Resolution of Generic Issue 70, Power Operated Relief Valve and Block Valve Reliability," and Generic Safety Issue 94, "Additional Low-Temperature Overpressure Protection for Light Water Reactors."

DC Cook will follow all the test requirements for Category B valves set forth in ISTC-5100. The seat leakage and sequential test requirements specified in ISTC-5111 and ISTC-5112 are considered not applicable to Category B valves. Testing shall be performed at the frequency specified in ISTC-3510.

3.13 Water Sealed Valves

The containment spray and RHR spray containment isolation check valves are classified as water sealed valves. In lieu of the requirements of 10CFR50 Appendix J, these valves are seat leakage tested in accordance with OM Code, Paragraph ISTC-3630(c), by imposing a static head of water on the downstream side of the valve and verifying that the leakage is within the permissible leakage rate for each valve. This testing method demonstrates that the containment spray and RHR check valve leakage over 30 days is limited to the water resident in the containment spray headers downstream of the check valves. The leakage specified would not deplete the water inventory so as to expose these valves to a post-LOCA environment for a minimum of 30 days in the event that a spray system must be shut down and drained. This testing method is as stated in Response to Question 22.15(5)

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Revision 4

of the original FSAR Appendix "Q", Amendment 81, dated August 1978.

3.14 Check Valve Testing

Valves that have a specified required accident flow are subject to NUREG-1482, Revision 1, Section 4.1.3. Either the flow through the valve is measured or other quantitative parameters with acceptance criteria are monitored to demonstrate required flow through the valve. Check valves that do not have a specified maximum required accident flow are tested to the open position by either flow or other positive means. Per ISTC-5221(b), if a mechanical exerciser is used to exercise the valve, the force(s) or torque(s) required to move the obturator and fulfill its safety function(s) shall meet the acceptance criteria specified by D.C. Cook. Per ISTC-5221(c), check valves may be disassembled, manually exercised, and inspected in lieu of flow (or flow reversal) testing as described in the Code. Per NUREG-1482, Revision 1, Section 4.1.2, non-intrusive methods are considered "other positive means" and may also be used to verify valve position. As an alternative to the testing or examination requirements of ISTC-3510, ISTC-3520, ISTC-3550, and ISTC-5221, a check valve condition monitoring program may be established per ISTC-5222 and implemented in accordance with OM Code Appendix II "Check Valve Condition Monitoring Program."

3.14.1 Check Valve Sample Plan

When using non-intrusive testing techniques or check valve disassembly in a sampling plan, the IST Program may implement testing such that similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group (for valve groups of greater than four, the grouping and test schedule must be justified in the description of the testing plan). The sample examination program shall group check valves of similar design, application, and service condition and require a periodic examination of one valve from each group. Grouping of check valves shall be technically justified and shall consider, as a minimum, valve manufacturer, design, service, size, materials of construction, and orientation. Maintenance and modification history should be considered in the grouping process. The details and bases of the sampling program shall be documented and recorded. (ISTC-5221.c)

3.14.2 Non-Intrusive Check Valve Testing

As discussed in NUREG-1482, Revision 1, Section 4.1.2, the NRC has determined that the use of non-intrusive techniques is acceptable to verify the full stroke of a check valve. The licensee may use non-intrusive techniques to verify the capability to open, close, and fully stroke in accord with quality assurance program requirements. These techniques are considered "other positive means" in accordance with Paragraph ISTC-5221(a), and relief is not required except as would be necessary for the testing frequency if the test interval extends beyond each refueling outage as allowed by the OM Code.

During the initial test of each valve, non-intrusive techniques will be used to verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke. Initial testing of check valves using non-intrusive techniques shall only be performed when the valve is known to be operating acceptably. During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked and monitored using non-intrusive techniques. Under a sampling program for check valves, one valve would typically be non-intrusively tested each time the testing is performed, on a rotating schedule and the balance of the group would be flow tested. If problems are found with the sample valve that are determined to affect the operational readiness of the valve, all valves in the group must be tested using non-intrusive techniques during the same outage (the group may not consist of valves in more than one unit).

The NRC has determined that non-intrusive techniques meet the Code requirements for verifying disk movement for the full-stroke exercising (opening and closing) of check valves. The non-intrusive verification allows flow testing at repeatable conditions to be performed on all valves in a group while requiring non-intrusive tests of only one of the group on a rotating schedule. Relief is not required because this test method is considered an acceptable "other positive means," even if used on a rotating basis. However, if the recommended alternative methods of this section are implemented, the licensee must describe the implementation of this section in the IST program document. This recommendation is not intended to mandate the use of non-intrusive techniques.

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Revision 4

The performance of non-intrusive testing initially on all valves in the group demonstrates that the full-stroke capability verification is acceptable. By repeating the flow test under the same conditions, with non-intrusive verification of only one of the four valves, verifies that the testing is repeatable. If testing finds a problem with one component, all remaining components in that group must be checked with the non-intrusive techniques. When the system has not been modified and the flow and pressure conditions are repeated, no phenomena would be expected to invalidate the testing, as verified initially, that would not be indicated in one of the four components.

Another alternative that may be employed is radiography. The position of the disk and the general condition of the internals will be determined using the radiographic method. This methodology is normally used for verification of valve closure only.

3.14.3 Check Valves Verified Closed by Leak Testing

The OM Code requires that check valves performing a safety function in the closed position be exercised to that position. Certain of these valves cannot be verified in the closed position quarterly because they do not have remote position indication and are generally located inside reactor containment or at other inaccessible locations. These valves may lack design provisions for system testing to verify closure capability at any plant condition. The only practical means of verifying valve closure may be by performing a seat leakage test. Many of these valves are Category A/C valves that are Type C leak-rate tested during each refueling outage as specified in Appendix J to 10 CFR Part 50.

If no other practical means is available, it is acceptable to verify that check valves are capable of closing by performing leak-rate testing, such as local leak rate testing in accordance with Appendix J to 10 CFR Part 50, at each reactor refueling outage. Recognizing that the setup and performance limitations may render leak testing impractical during power operation and cold shutdown outages, the NRC has determined that implementation of an extension of the test frequency for such valves is acceptable in accordance with 10 CFR 50.55a(f).

Pursuant to NUREG-1482, Revision 1, Section 4.4.7, as an alternative to check valve closure verification by Type C seat leakage testing at refueling, the Appendix II Check Valve Condition Monitoring Program could justify extending the exercise test interval to the leak test frequencies specified in Option B of Appendix J based on the valve's performance and operating condition.

3.14.4 Check Valve Disassembly and Inspection

During the disassembly process, the full-stroke motion of the obturator shall be verified. Full-motion of the obturator shall be re-verified immediately prior to completing reassembly. Check valves that have their obturator disturbed before full-stroke motion is verified shall be examined to determine if a condition exists that could prevent full opening or closure of the obturator.

At least one valve from each group shall be disassembled and examined at each refueling outage; all valves in each group shall be disassembled and examined at least once every 6 years (8 years if on a 24 month fuel cycle). If problems are found with the sample valve, that are determined to affect the operational readiness of the valve, all valves in the group must be tested during the same outage.

Before return to service, valves that were disassembled for examination or that received maintenance that could affect their performance; shall be exercised, full or part stroke if practicable, with flow in accordance with ISTC-3520. Those valves shall also be tested for other applicable requirements (e.g., closure verification or leak rate testing) before returning them to service.

As an alternative to the aforementioned disassembly and inspection frequency, the Appendix II Check Valve Condition Monitoring Program could justify extending the disassembly and inspection interval to reduce the burden of unnecessary IST based on previous disassembly and inspection results.

3.15 Check Valve Condition Monitoring



As an alternative to the testing or examination requirements of ISTC-3510, ISTC-3520, ISTC-3550, and ISTC-5221, D.C. Cook shall establish a check valve condition monitoring program per ISTC-5222 and implement the program in accordance with OMb Code-2003 Appendix II "Check Valve Condition Monitoring Program."

The purpose of this program is to both (a) improve check valve performance and to (b) optimize testing, examination, and preventive maintenance activities in order to maintain the continued acceptable performance of a select group of check valves.

Examples of candidates for (a) improved valve performance are check valves that: (1) have an unusually high failure rate during inservice testing or operations; (2) cannot be exercised under normal operating conditions or during shutdown; (3) exhibit unusual, abnormal, or unexpected behavior during exercising or operation, or (4) D.C. Cook elects to monitor for improved valve performance.

Examples of candidates for (b) optimization of testing, examination, and preventive maintenance activities are check valves with documented acceptable performance that: (1) have had their performance improved under the Condition Monitoring Program; (2) cannot be exercised or are not readily exercised during normal operating conditions or during shutdowns; (3) can only be disassembled and examined, or (4) D.C Cook elects to optimize all the associated activities of the valve or valve group in a consolidated program.

If the Appendix II Condition Monitoring Program for a valve or valve group is discontinued then the requirements of ISTC-3510, ISTC-3520, ISTC-3550, and ISTC-5221 must be implemented.

Valves included in the Check Valve Condition Monitoring Program (CMP) will be identified in the "Comments" column of the Valve Tables. The Code testing specified in the Tables is replaced by the activities/tests identified in the specific CMP Plan.

3.16 Manual Valves

Manual valves within the scope of IST that perform an active safety function shall be exercised at least once every 2 years as required by 10 CFR 50.55a(b)(3)(vi).

3.17 Relief Valve Testing

The pressure relief devices addressed in this program are those for protecting systems or portions of systems which perform a required function in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of an accident.

ISTC-5240, requires safety and relief valves to be tested in accordance with Mandatory Appendix I. If the "as found" lift set point of a valve is out-of-tolerance, then two additional valves from the same sample group shall be tested. If any of these additional valves fail to meet the set point acceptance criteria, then all valves in that sample group shall be tested. Relief valve sample groups shall contain only valves of the same manufacturer, type, system application, and service media. All test failures shall be evaluated for generic concerns; however, additional testing of valves outside the sample group shall not be required unless the evaluation determines that the operability of other valves may be in question.

Tests shall be performed on all Class 2 and 3 relief devices used in a thermal relief application every 10 years, unless performance data indicate more frequent testing is necessary. In lieu of tests the thermal relief devices may be replaced at a frequency of every 10 years, unless performance data indicate more frequent replacements are necessary. Thermal relief devices are exempt from the grouping and sample testing requirements of Appendix I.

If a check valve used as a pressure relief device is capacity certified, then it shall be classified as a pressure or vacuum relief device. If a check valve used to limit pressure is not capacity certified, then it shall be classified as a check valve.

16 OF 19



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3.18 Vacuum Breaker Testing

Vacuum breakers shall meet the applicable inservice test requirements of ISTC-5220 and Appendix I, as applicable.

3.19 Inservice Test Plan Valve Tables

The following notations are used in the valve summary tables:

SYSTEM: The plant system in which the valve is located.

COMPONENT: The valve component identification code.

P&ID (Coord): The associated piping and instrumentation drawing number and the drawing coordinate location for the valve.

FUNCTION: Indentifies the valve as "ACTIVE" or "PASSIVE" as defined in ISTA-2000

CODE CLASS: The ASME Inservice Inspection (ISI) classification of the component. Augmented components are classified "0".

TYPE: One of the following:

3W 3-Way ANG Angle BALL Ball BTF Butterfly CHK Check **DIA Diaphragm** GAT Gate GLB Globe PORV Power or Pilot Operated Relief Valve REL Relief (safety and relief valves) **TH** Throttle **VB Vacuum Breaker**

ACTUATOR: Type of valve actuator. One of the following:

AO Air Operated

HYD Hydraulic

MAN Manual

MO Motor Operated

SA Self Actuated (e.g., check or relief valve)

SO Solenoid Operated

CATEGORY: Category of valve, either A, B, C, or D, as defined in ISTC-1300. Combinations are possible (e.g., AC).

SIZE: Nominal valve size, in

POSITION: The normal (Norm) and fail-safe (Fai) positions of the valve. One of the following:

Al Asis

C Closed



Revision 4

O Open

O/C Open/Closed or vice versa

TH Throttled to intermediate position(s)

TEST: Testing implemented to comply with the OM Code requirements. See Test Method codes.

FREQ: Frequency for each specified test. One of the following:

- XM Where X equals the number of months between tests
- XA Where X equals the number of years between tests
- XR Where X equals the number of refueling outages between tests
- C Cold shutdown frequency
- Q Quarterly when system is required operable
- R Refueling outages

OPB Frequency specified by Appendix J Leakage Rate Testing Program

CODE DEV: Indentifies any Cold Shutdown Justifications (CSJ's), Refueling Outage Justifications (ROJ's) or relief requests applicable to the specified test.

COMMENTS: Used to provide additional information regarding the valve or its associated testing.

Description of Test Method Codes:

Exercising of Category A and Category B Valves

FSE: Exercise valve (full-stroke open and/or closed) for operability per ISTC-3510.

PIT: Observe valve position indicators at least once every 2 years to verify that the valve operation is accurately indicated remotely per ISTC-3700.

FST: Exercise valve (with fail-safe actuators) to observe failure mode on loss of actuation power per ISTC-3560.

ST-O,

ST-C: Exercise power operated valve (full-stroke) to its safety position(s) and measure time per ISTC-3520 and ISTC-5100. The direction of stroke timing is indicated by an O (open) or C (closed) immediately following the test method code. Open and closed stroke times are obtained individually.

DIAG: Motor operated valve diagnostic test

Exercising of Category C Valves

BDT-O,

BDT-C: Bi-directional exercise test in the non-safety related open or closed directions per ISTC-3522 and ISTC-5220

FS-O,

FS-C: Exercise valve (full-stroke open and/or closed) for operability per ISTC-3522 and ISTC-5220.

PS-O: Exercise valve (part-stroke open) with flow is no longer an OM Code periodic test requirement for check valves. Partial stroke exercise with flow will be performed subsequent to check valve reassembly, if practicable, and may be considered as an acceptable bi-directional exercise in the non-safety related direction. The partially open position when satisfying bi-directional exercise requirements should correspond to the normal or expected system flow.



Revision 4

Testing of Safety Valves

SVT: Perform pressure relief device testing in accordance with the requirements Appendix I Section I-7000 of the OM Code.

Seat Leakage Testing of Valves

LT: Seat leakage test valve in accordance with requirements of ISTC-3630 at refueling outage frequency but at least once every two years.

LJ: Containment isolation valves are seat leakage tested in accordance with 10 CFR 50 Appendix J, as referenced in ISTC-3620. Containment isolation valves which also perform a reactor coolant system pressure isolation function are additionally tested in accordance with ISTC-3630.

For those valves eligible for an extended test frequency in accordance with the Appendix J Program, the test plan tables will indicate "OPB" under the "Test Frequency" heading.

For those valves requiring seat leakage testing, in accordance with 10 CFR 50 Appendix J, each refueling outage, the test plan tables will indicate "R" under the "Test Frequency" heading.



REL-001

Component ID	Class	Cat.	System	Label
1-MRV-213	2	В	MS	STEAM GENERATOR OME-3-1 POWER OPERATED RELIEF VALVE
1-MRV-223	2	В	MS	STEAM GENERATOR OME-3-2 POWER OPERATED RELIEF VALVE
1-MRV-233	2	В	MS	STEAM GENERATOR OME-3-3 POWER OPERATED RELIEF VALVE
1-MRV-243	2	В	MS	STEAM GENERATOR OME-3-4 POWER OPERATED RELIEF VALVE
2-MRV-213	2	В	MS	STEAM GENERATOR OME-3-1 POWER OPERATED RELIEF VALVE
2-MRV-223	2	В	MS	STEAM GENERATOR OME-3-2 POWER OPERATED RELIEF VALVE
2-MRV-233	2	В	MS	STEAM GENERATOR OME-3-3 POWER OPERATED RELIEF VALVE
2-MRV-243	2	В	MS	STEAM GENERATOR OME-3-4 POWER OPERATED RELIEF VALVE

FUNCTION:

These valves have an active safety function in the open position for decay heat removal in hot standby. The power operated relief valves, PORVs, also function to minimize reactor transients due to rapid load changes, to provide the first means of protection in the event of a steam dump failure and to prevent challenges to the steam generator safety valves. Decay heat removal in hot standby is initially achieved via the operation of steam generator safety valves. Subsequent heat removal will be achieved via operation of the steam generator PORVs. For alternative shutdown, manual operation of the PORVs from local control stations near LSI-1, Steam Generators #1 and #4 Local Shutdown Station, and LSI-2, Steam Generators #2 and #3 Local Shutdown Station, is achieved via pneumatic valve loading controls with backup motive power provided by the permanent plant nitrogen accumulator and distribution header. The PORVs have an active safety function in the closed position to prevent uncontrolled steam release in the event that the valve is actuated to relieve excessive pressure. The steam generator PORV's are also required to fail closed on a loss of control power or instrument air.

TEST REQUIREMENT:

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

BASIS for RELIEF:

These valves are designed to fail closed on loss of control air, but are not provided with means to individually vent air from the valves. Each valve is provided with hand-auto stations for valve setpoint adjustment. The PORV controllers modulate their respective valves based on the input error signal generated by comparison of actual steam generator pressure and the operator adjusted setpoint. Due to the design of these valves, relief is requested from the fail-safe testing requirements of OM Code ISTC-3560. Relief is requested pursuant to 10 CFR 50.55a(f)(6)(i) based on the impracticality of performing testing in accordance with the Code requirements and in consideration of the burden if the Code requirements were imposed on the Donald C. Cook Nuclear plant.

ALTERNATE TESTING:

These valves will be full stroke exercised and stroke timed once per cycle in accordance with OM Code ISTC-3521. The PORVs, when subject to full stroke exercising, are observed locally, verifying that valve stem travel does not exhibit any abnormal or erratic action when moved to the required position in both directions.

This Relief Request, upon approval, will be applied to the Donald C. Cook Fourth 10-Year Interval.

REFERENCES:

NRC Letter, Evaluation of Third 10-Year Interval For The Pump and Valve Inservice Testing Program For Donald C. Cook Nuclear Plant, Units 1 and 2 (TAC Nos.M95721, M95722, M95890, and M95891), dated 5/27/97

APPROVAL REFERENCES:



REL-001

3rd 10-year Interval approval via NRC Letter, Evaluation of Third 10-Year Interval For The Pump and Valve Inservice Testing Program For Donald C. Cook Nuclear Plant, Units 1 and 2 (TAC Nos.M95721, M95722, M95890, and M95891), dated 5/27/97

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Component ID	Class	Cat.	System	Label
1-IMO-261	2	Α	SI	REFUELING WATER STORAGE TANK TK-33 SUPPLY TO SAFETY
1-IMO-910	2	Α	SI	REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS
1-IMO-911	2	Α	SI	REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS
2-IMO-261	2	А	SI	SUCTION HEADER TRAIN 'B' SHUTOFF VALVE REFUELING WATER STORAGE TANK TK-33 SUPPLY TO SAFETY
2 1100 010	0		61	INJECTION PUMPS SHUTOFF VALVE
2-11/10-910	2	~	31	SUCTION HEADER TRAIN 'A' SHUTOFF VALVE
2-IMO-911	2	Α	SI	REFUELING WATER STORAGE TANK TO CVCS CHARGING PUMPS SUCTION HEADER TRAIN 'B' SHUTOFF VALVE

FUNCTION:

IMO-261

This normally open motor operated valve has an active safety function in the open position to provide suction for the High Head Safety Injection (HHSI) pumps from the refueling water storage tank (RWST). The RWST is the safety-related suction source for the HHSI pumps during the injection phase of emergency core cooling. This valve has an active safety function in the closed position to isolate the RWST when the HHSI pumps are realigned to take suction from the containment sump, via the Residual Heat Removal (RHR) system, during the recirculation phase of safety injection following a loss-of-coolant accident (LOCA). This motor operated suction valve and the HHSI pump suction check valve (SI-101) must both be capable of closure to meet single failure criteria.

IMO-910, 911

These normally closed motor operated valves are located in a parallel configuration in the supply piping from the RWST to the centrifugal charging pumps. These valves have an active safety function in the open position to provide a suction flow path for the centrifugal charging pumps from the RWST. These valves are installed in parallel to meet single failure criterion and open automatically upon receipt of a safety injection signal or Volume Control Tank (VCT) Low-Low Level. These valves have an active safety function in the closed position to isolate the RWST when the centrifugal charging pumps are realigned to take suction from the containment sump (via the RHR system) during the recirculation phase of safety injection following a LOCA. These motor operated valves and the centrifugal charging pump suction check valve from the RWST, SI-185, must all be capable of closure to meet the single failure criterion.

TEST REQUIREMENT:

ISTC-3630(b) requires that valve seat leakage tests shall be made with the pressure differential in the same direction as when the valve is performing its function.

BASIS for RELIEF:

The system piping associated with these valves was not designed to accommodate seat leakage testing for these valves. The acceptability of testing these valves in the reverse direction was discussed with the NRC in a meeting documented by NRC letter titled "Summary of October 9, 1997, Meeting on RWST Mini-Flow Recirculation Line Valve Testing." Relief is requested pursuant to 10 CFR 50.55a(f)(6)(i) based on the impracticality of performing testing in accordance with the Code requirements and in consideration of the burden if the Code requirements were imposed on the Donald C. Cook Nuclear plant.

ALTERNATE TESTING:

Revision 4

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These valves will be tested in a reverse flow direction using the static head from the RWST.

This Relief Request, upon approval, will be applied to the Donald C. Cook Fourth 10-Year Interval.

REFERENCES:

Letter AEP:NRC:1260G4, Confirmatory Action Letter (CAL) Supplemental Response, dated 12/24/97 CAL No. RIII-97-011 CR P-97-02450 Commitment 6896

APPROVAL REFERENCES:

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Component ID Class Cat. System Label	l .	Label	System	Cat.	Class	Component ID
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Various

Various

FUNCTION:

This relief request is written for the general application of ASME Code Case OMN-1, "Alternate Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants," in lieu of preservice and inservice testing these motor-operated valves in accordance with ASME OM Code, Subsection ISTC, except for ISTC-3600. Certain motor-operated valves in ASME Class 1, 2, and 3 systems are required to perform a specific function in shutting down the reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of an accident. These valves are those that include the designation "OMN-1" in the "Comments" column of the Valve Tables.

TEST REQUIREMENT:

ISTA-3130(b) states: "Code Cases shall be applicable to the edition and addenda specified in the test plan." The edition and addenda specified in the test plan for the fourth ten-year interval for the Donald C. Cook Nuclear Plant is the 2001 Edition through the OMb-2003 Addenda.

BASIS for RELIEF:

Code Case OMN-1, "Alternate Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants," contains no applicability statement. In the latest edition/addenda incorporated by reference in 10 CFR 50.55a(b)(3) (i.e., the 2001 Edition with Addenda through OMb-2003), the expiration date given for OMN-1 is March 30, 2004. Code Case OMN-1 is included in the 2004 Edition of the OM Code with a new expiration date of March 30, 2007; however, the 2004 Edition of the OM Code has not been incorporated by reference in 10 CFR 50.55a(b)(3). Paragraph 10 CFR 50.55a(b)(6) references Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code," which conditionally approves the use of Code Case OMN-1 "in lieu of the provisions for stroke-time testing in Subsection ISTC of the 1995 Edition up to and including the 2000 Addenda of the ASME OM Code." Relief is requested pursuant to 10 CFR 50.55a(a)(3)(i) based on the proposed alternative providing an acceptable level of quality and safety.

ALTERNATE TESTING:

Donald C. Cook Nuclear Plant will apply the requirements of OMN-1, "Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants," including the conditions specified in Table 2 of USNRC Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code," in lieu of the rules for preservice and inservice testing in ASME OM Code, Subsection ISTC, except for ISTC-3600 of the 2001 Edition up to and including the OMb-2003 Addenda of the ASME OM Code.

This relief request, upon approval, will be applied to the Donald C. Cook Fourth 10-year Interval.

REFERENCES:

ASME OM Code, 2004 Edition Code Case OMN-1 Regulatory Guide 1.192 NUREG 1482 Revision 1, section 2.1.1

APPROVAL REFERENCES:

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Component ID	Class	Cat.	System	Label
1-PP-46-1	3	A	CVCS	BORIC ACID STORAGE TANKS TRANSFER PUMP #1
1-PP-46-2	3	Α	CVCS	BORIC ACID STORAGE TANKS TRANSFER PUMP #2
2-PP-46-3	3	. Α	CVCS	BORIC ACID STORAGE TANKS TRANSFER PUMP #3
2-PP-46-4	3	Α	CVCS	BORIC ACID STORAGE TANKS TRANSFER PUMP #4

FUNCTION:

Two horizontal, centrifugal, two speed pumps with mechanical seals are available per unit. Although not required, one pump may be aligned to run continuously at low speed to provide recirculation of the boric acid system and the boric acid tank. The second pump can be aligned with the shared boric acid tank and is considered as a standby pump, with service being transferred as operation requires. This second pump is also used intermittently to circulate fluid through the shared tank. Automatic initiation of the reactor coolant makeup system will align the running pump for high speed operation to provide normal makeup of boric acid solution as required. Manual operation of the boric acid transfer pumps (i.e., starting an inactive pump) can also be used to provide reactor coolant makeup as necessary. For emergency boration, supplying of boric acid solution to the suction of the charging pump can be accomplished by manually choosing either fast or slow speed and actuating either or both pumps. The transfer pumps also function to transfer boric acid solution from the batching tank to the boric acid tanks.

TEST REQUIREMENT:

OM Code ISTB-3540(a), On centrifugal pumps, except vertical line shaft pumps, measurements shall be taken in a plane approximately perpendicular to the rotating shaft in two approximately orthogonal directions on each accessible pump-bearing housing. Measurement shall be taken in the axial direction on each accessible pump thrust bearing housing.

BASIS for RELIEF:

By design, the only accessible point for taking axial vibration measurements is the outboard motor bearing. It is unsafe to monitor the axial direction vibration on the inboard pump bearing due to the proximity of the rotating shaft, and there is no position for monitoring the outboard pump bearing housing because of the presence of heat tracing. Modifications to the coupling shield to allow access were attempted. However, the modified shield did not provide sufficient clearance to allow individuals performing the measurement to safely place their hands near the rotating shaft. Relief is requested pursuant to 10 CFR 50.55a(a)(3)(i) based on the proposed alternative providing an acceptable level of quality and safety.

ALTERNATE TESTING:

Axial vibration will be measured at the outboard motor bearing. The vibration limits contained in ASME OM Code Table ISTB-5100-1, will be applied to the vibration levels monitored at the outboard motor bearing during both the Group A test and Comprehensive test.

This Relief Request, upon approval, will be applied to the Donald C. Cook Fourth 10-Year Interval.

REFERENCES:

Letter AEP:NRC:0969AM, Donald C. Cook Nuclear Plant Units 1 and 2, Relief Requests For The Third Ten-Year Pump In-Service Test Plan, dated June 12, 1996

NRC Letter, Evaluation of Third 10-Year Interval For The Pump and Valve Inservice Testing Program For Donald C. Cook Nuclear Plant, Units 1 and 2 (TAC Nos.M95721, M95722, M95890, and M95891), dated 5/27/97 Letter AEP:NRC:0969BL, Donald C. Cook Nuclear Plant Units 1 and 2, Relief Request For The Third Ten-Year Pump



In-Service Test Program, dated 3/26/98

NRC Letter, Donald C. Cook (D.C. Cook) Nuclear Plant, Units I and 2 - Evaluation of Relief Requests For The Pump and Valve Inservice Testing Program (TAC Nos. M99494 and M99499), dated 12/29/98

APPROVAL REFERENCES:

3rd 10-year Interval approval via NRC Letter, Donald C. Cook (D.C. Cook) Nuclear Plant, Units I and 2 -Evaluation of Relief Requests For The Pump and Valve Inservice Testing Program (TAC Nos. M99494 and M99499), dated 12/29/98

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Component ID	Class	Cat.	System	Label
1-PP-7E	3	A	ESW	EAST ESSENTIAL SERVICE WATER PUMP
1-PP-7W	3	Α	ESW	WEST ESSENTIAL SERVICE WATER PUMP
2-PP-7E	3	Α	ESW	EAST ESSENTIAL SERVICE WATER PUMP
2-PP-7W	3	Α	ESW	WEST ESSENTIAL SERVICE WATER PUMP

FUNCTION:

The Essential Service Water (ESW) pumps function to provide the primary heat sink for removal of heat from the Component Cooling Water System, Containment Spray System, Control Room Heating Ventilation and Air conditioning System, Emergency Diesel Generators and Auxiliary Feedwater Pump Room Coolers. These pumps also function to provide an alternate source of water to the Auxiliary Feedwater System and provide an emergency source of makeup water to the emergency diesel generator jacket cooling water circuits.

TEST REQUIREMENT:

1) ISTB-3510(a), Instrument Accuracy shall be within the limits of Table ISTB-3500-1.

2) Table ISTB-3500-1, Acceptable instrument accuracy for vibration is +/- 5%.

3) ISTB-3510(e), The frequency response range of the vibration measuring transducers and their readout system shall be from one-third minimum pump shaft rotational speed to at least 1000Hz.

BASIS for RELIEF:

The Code requires vibration equipment to be calibrated at +/- 5% across the frequency response range, which includes the minimum frequency response of 1/3 pump shaft speed. For the ESW pumps this is 288 rpm or 4.8 Hz. The vibration meters used at DC Cook can only be calibrated at +/- 5% down to and including 6 Hz. Below 6 Hz. the accuracy is > 5%, however the calibration lab strives to maintain accuracy below 6 Hz. as low as reasonably achievable for the required frequency response range.

The average velocity for an IST test is a single, average energy reading. The effect of this change in accuracy, when averaged into the overall reading, is quite small. It would only be a concern if a single frequency in the *spectrum* were being evaluated between 4 - 6 Hz. Furthermore, detection of pump degradation via vibration data is based on changes in vibration measurement from one test to another. Thus, if the calibration accuracy is consistent, then the change in vibration measurement from one test to another is appropriate information for trending purposes.

Existing vibration equipment will provide adequate trending information and may be used for ESW pump vibration data collection.

This Relief is requested pursuant to 10 CFR 50.55a(a)(3)(i) based on the proposed alternative providing an acceptable level of quality and safety.

ALTERNATE TESTING:

Vibration data for the ESW pumps will be taken with equipment calibrated from 6 Hz. to at least 1000 Hz. at the Code specified accuracy of +/- 5%. The calibration accuracy between 4.8 Hz. (1/3 pump shaft speed) and 6 Hz. will be maintained as low as reasonably achievable (to the required 5%) for this small 1.2 Hz portion of the required frequency response range.

This Relief Request, upon approval, will be applied to the Donald C. Cook Fourth 10-Year Interval.



REFERENCES:

APPROVAL REFERENCES:

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Donald C. Cook Nuclear Plant IST Program Program Fourth Ten Year Interval REQUEST FOR RELIEF REL-PP3

Component ID	Class	Cat.	System	Label
1-PP-35E	2	Α	RHR	EAST RESIDUAL HEAT REMOVAL PUMP
1-PP-35W	2	Α	RHR	WEST RESIDUAL HEAT REMOVAL PUMP
2-PP-35E	2	Α	RHR	EAST RESIDUAL HEAT REMOVAL PUMP
2-PP-35W	2	Α	RHR	WEST RESIDUAL HEAT REMOVAL PUMP

FUNCTION:

These pumps inject borated water into the Reactor Coolant System (RCS) in response to a large break loss-of-coolant accident (LBLOCA) when the RCS pressure drops below the shutoff head of the Residual Heat Removal (RHR) pumps. These pumps also provide a source of suction to the safety injection and centrifugal charging pumps during the recirculation phase following the LBLOCA.

TEST REQUIREMENT:

OM Code ISTB-3510(b)(1), The full-scale range of each analog instrument shall be not greater than three times the reference value.

BASIS for RELIEF:

The range of analog suction pressure test gauges used during the performance of RHR pump surveillance testing during unit shutdowns does not meet the range limitation imposed by ISTB-3510(b)(1) in that the instrument range exceeds the respective reference value by greater than a factor of three. The maximum acceptable gauge range in accordance with ISTB-3510(b)(1) would be 0-60 psig (lowest reference value - 23.2 psi). The full scale accuracy for the Code allowed gauge range is +/- 2% or 1.2 psig for the Group A test. Due to the potential to encounter higher pressures when using the RCS as the suction source for testing during unit shutdowns, the test gauge used has a range of 0-600 psig. It is calibrated to a full scale accuracy of 0.1% or 0.6 psig.

The range of analog discharge pressure test gauges used during the performance of RHR pump surveillance testing during unit shutdowns does not meet the range limitation imposed by ISTB-3510(b)(1) in that the instrument range exceeds the respective reference value by greater than a factor of three. The maximum acceptable gauge range in accordance with ISTB-3510(b)(1) would be 0-500 psig (lowest reference value - 174 psi). The full scale accuracy for the Code allowed gauge range is +/- 2% or 10.0 psig for the Group A test. The test gauge used has a range of 0-600 psig and is calibrated to a full scale accuracy of 0.1% or 0.6 psig.

The combination of the range and accuracy of the 0-600 psig test gauges yield a reading more accurate than the readings achieved from the instruments that meet the requirements as stated in ISTB-3510(b)(1) for the Group A pump test.

The range of the installed analog flow instrument used during the performance of RHR pump surveillance testing does not meet the range limitation imposed by ISTB-3510(b)(1) in that the instrument range exceeds the respective reference value by greater than a factor of three during testing on minimum flow. The installed gauge used has a range of 0-1500 gpm and is calibrated to a full scale accuracy of 1.0% or 15 gpm. The full scale accuracy of the Code allowed gauge is +/- 2% or 22.5 gpm when evaluated against the RHR pump minimum operating point of 375 gpm with an allowed maximum gauge range of 1125 gpm.

The combination of the range and accuracy of the installed 0-1500 gpm flow gauges yield a reading more accurate than the readings achieved from the instruments that meet the requirements as stated in ISTB-3510(b)(1) for the Group A test.

This Relief is requested pursuant to 10 CFR 50.55a(a)(3)(i) based on the proposed alternative providing an acceptable level of quality and safety.



ALTERNATE TESTING:

RHR pump suction and discharge pressures will be measured via available test gauges meeting the alternate requirements, as identified in the Basis For Relief, of a range of 0-600 psig and calibrated to a full scale accuracy of 0.1% or 0.6 psig for the Group A test.

RHR pump flow will be measured via the installed 0-1500 gpm flow instruments calibrated to a full scale accuracy of 1.0% for the Group A test.

This Relief Request, upon approval, will be applied to the Donald C. Cook Fourth 10-Year Interval.

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REFERENCES:

NUREG-1482, Revision 1, Section 5.5.1

APPROVAL REFERENCES:

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Donald C. Cook Nuclear Plant IST Program Program Fourth Ten Year Interval REQUEST FOR RELIEF REL-PP4

Component ID	Class	s Cat.	System	Label
1-PP-4	3	В	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP
2-PP-4	3	В	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP

FUNCTION:

This relief request is written for the general application of ASME Code Case OMN-6, "Alternate Rules for Digital Instruments" and shall be applied when ever a digital instrument is used to acquire a pump test parameter.

TEST REQUIREMENT:

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

ISTA-3130, Code Cases shall be applicable to the edition and addenda specified in the test plan.

BASIS for RELIEF:

Code Case OMN-6, "Alternate Rules for Digital Instruments", is unconditionally approved for use by Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability", ASME OM Code, dated June 2003. This Code Case allows the selection of digital instruments such that the reference value does not exceed 90% of the calibrated range of the instrument in lieu of the 70% required by the Code. The applicability of this Code Case is to the ASME OM Code-1990 Edition through ASME OMb-1997 Addenda. The Donald C. Cook Nuclear Plant is updating to the latest Edition and Addenda of the OM Code approved for use by incorporation in 10 CFR 50.55a(b). ASME OM Code-2001 Edition with Addenda through OMb-2003 will be utilized during the Fourth 10-Year IST Interval. Pursuant to the guidelines provided in NUREG-1482, Revision 1, Section 2.1.1, Donald C. Cook Nuclear Plant is requested pursuant to 10 CFR 50.55a(a)(3)(i) based on the proposed alternative providing an acceptable level of quality and safety.

ALTERNATE TESTING:

Digital instruments shall be selected such that the reference value does not exceed 90% of the calibrated range of the instrument.

This Relief Request, upon approval, will be applied to the Donald C. Cook Fourth 10-Year Interval.

REFERENCES:

Code Case OMN-6 Regulatory Guide 1.192 NUREG-1482, Revision 1, Section 2.1.1

APPROVAL REFERENCES:

Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-001

Component ID	Class	Cat.	System	Label
1-FW-132-1	2	С	AFW	WEST MOTOR DRIVEN AUX FEED PUMP SUPPLY TO STEAM GENERATOR #1 CHECK VALVE
1-FW-132-2	2	С	AFW	EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR #2 CHECK VALVE
1-FW-132-3	2	C	AFW	EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR #3 CHECK VALVE
1-FW-132-4	2	С	AFW	WEST MOTOR DRIVEN AUX FEED PUMP SUPPLY TO STEAM GENERATOR #4 CHECK VALVE
2-FW-132-1	2	С	AFW	WEST MOTOR DRIVEN AUX FEED PUMP SUPPLY TO STEAM GENERATOR #1 CHECK VALVE
2-FW-132-2	2	С	AFW	EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR #2 CHECK VALVE
2-FW-132-3	2	С	AFW	EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUPPLY TO STEAM GENERATOR #3 CHECK VALVE
2-FW-132-4	2	С	AFW	WEST MOTOR DRIVEN AUX FEED PUMP SUPPLY TO STEAM GENERATOR #4 CHECK VALVE

FUNCTION:

These values open to provide a supply flow path for auxiliary feedwater (AFW) to the associated steam generators and close to isolate the low temperature/pressure upstream AFW system piping from the high temperature/pressure steam generator and main feedwater systems.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves cannot be full or part-stroke exercised during power operation without energizing the AFW System and delivering cold water to the steam generators. This would result in thermal shock to the steam generator nozzles and potential increase in reactor power due to the introduction of the colder water.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability during cold shutdown periods or during plant startup following a cold shutdown period in accordance with OM Code, ISTC-3522 and 5221.

REFERENCES:

Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-002

Component ID	Class	Cat.	System	Labei
1-FW-134	3	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 SUCTION HEADER CHECK VALVE
1-FW-135	3	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 DISCHARGE CHECK VALVE
2-FW-134	3	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 SUCTION HEADER CHECK VALVE
2-FW-135	3	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 DISCHARGE CHECK VALVE

FUNCTION:

These valves open to provide a suction/discharge flow path for the Turbine Driven Auxiliary Feedwater Pump.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves cannot be full stroke exercised open during power operation without energizing the Auxiliary Feedwater System and delivering cold water to the steam generators. This would result in thermal shock to the steam generator nozzles and potential increase in reactor power due to the introduction of the colder water.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability during cold shutdown periods or during plant startup following a cold shutdown period in accordance with OM Code, ISTC-3522 and 5221.

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Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

CSJ-003

Component ID	Class	Cat.	System	Label
1-FW-138-1	2	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM
				GENERATOR OME-3-1 CHECK VALVE
1-FW-138-2	2	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM
				GENERATOR OME-3-2 CHECK VALVE
1-FW-138-3	2	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM
				GENERATOR OME-3-3 CHECK VALVE
1-FW-138-4	2	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM
				GENERATOR OME-3-4 CHECK VALVE
2-FW-138-1	2	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM
				GENERATOR OME-3-1 CHECK VALVE
2-FW-138-2	2	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM
				GENERATOR OME-3-2 CHECK VALVE
2-FW-138-3	2	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM
				GENERATOR OME-3-3 CHECK VALVE
2-FW-138-4	2	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP SUPPLY TO STEAM
				GENERATOR OME-3-4 CHECK VALVE

FUNCTION:

These values open to provide a supply flow path for auxiliary feedwater (AFW) to the associated steam generators and close to isolate the low temperature/pressure upstream AFW system piping from the high temperature/pressure steam generator and main feedwater systems.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves cannot be full stroke exercised open during power operation without energizing the AFW System and delivering cold water to the steam generators. This would result in thermal shock to the steam generator nozzles and potential increase in reactor power due to the introduction of the colder water.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability during cold shutdown periods or during plant startup following a cold shutdown period in accordance with OM Code, ISTC-3522 and 5221.

REFERENCES:

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Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

CSJ-004

Component ID	Class	Cat.	System	Label
1-XCR-100	2	A	CAS	100 PSI CONTROL AIR TO CONTAINMENT CONTROL AIR HEADER #2
				TRAIN 'A' CONTAINMENT ISOLATION VALVE
1-XCR-101	2	Α	CAS	100 PSI CONTROL AIR TO CONTAINMENT CONTROL AIR HEADER #2
				TRAIN 'B' CONTAINMENT ISOLATION VALVE
1-XCR-102	2	Α	CAS	100 PSI CONTROL AIR TO CONTAINMENT CONTROL AIR HEADER #1
				TRAIN 'A' CONTAINMENT ISOLATION VALVE
1-XCR-103	2	Α	CAS	100 PSI CONTROL AIR TO CONTAINMENT CONTROL AIR HEADER #1
				TRAIN 'B' CONTAINMENT ISOLATION VALVE
2-XCR-100	2	Α	CAS	100 PSI CONTROL AIR TO CONTAINMENT CONTROL AIR HEADER #2
				TRAIN 'A' CONTAINMENT ISOLATION VALVE
2-XCR-101	2	Α	CAS	100 PSI CONTROL AIR TO CONTAINMENT CONTROL AIR HEADER #2
				TRAIN 'B' CONTAINMENT ISOLATION VALVE
2-XCR-102	2	Α	CAS	100 PSI CONTROL AIR TO CONTAINMENT CONTROL AIR HEADER #1
				TRAIN 'A' CONTAINMENT ISOLATION VALVE
2-XCR-103	2	Α	CAS	100 PSI CONTROL AIR TO CONTAINMENT CONTROL AIR HEADER #1
				TRAIN 'B' CONTAINMENT ISOLATION VALVE

FUNCTION:

These air operated containment isolation valves are located in the control air supply lines to the containment. These valves perform an active safety function in the closed position to provide containment isolation.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These air operated containment isolation valves are located in the control air supply lines to the containment. These valves cannot be full-stroke tested during power operation without causing a loss of containment control air. Closure of these valves can potentially cause: 1) disruption of air flow to air operated valves in the containment; as a result, they would go to their fail safe position, e.g., close position for containment isolation valves, 2) systems from performing their design function, i.e., termination of system flow and change in reactor coolant system pressure and temperature, and 3) challenge to system safeguard protection which may result in a unit trip.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.

REFERENCES:

Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

CSJ-005

Component ID	Class	Cat.	System	Label
1-CCR-455	2	A	CCW	COMPONENT COOLING WATER TO REACTOR SUPPORT COOLERS
1-CCR-456	2	Α	ccw	REACTOR SUPPORT COOLERS CCW RETURN HEADER TRAIN 'A'
1-CCR-457	2	А	ccw	CONTAINMENT ISOLATION VALVE REACTOR SUPPORT COOLERS CCW RETURN HEADER TRAIN 'B'
2-CCR-455	2	Α	ccw	CONTAINMENT ISOLATION VALVE COMPONENT COOLING WATER TO REACTOR SUPPORT COOLERS
	-			CONTAINMENT ISOLATION VALVE
2-CCR-456	2	Α	CCW	REACTOR SUPPORT COOLERS CCW RETURN HEADER TRAIN 'A' CONTAINMENT ISOLATION VALVE
2-CCR-457	2	Α	CCW	REACTOR SUPPORT COOLERS CCW RETURN HEADER TRAIN 'B'

FUNCTION:

These air operated containment isolation valves are located in the component cooling supply lines to the reactor support coolers. These valves perform an active safety function in the closed position to provide containment isolation.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These valves are the component cooling water isolation valves for the reactor support coolers. The valves cannot be tested at power operation without securing cooling water to reactor support coolers which could cause overheating of the concrete around the reactor supports.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.



Component ID 1-CTS-109	Class	Cat.	System CTS	Label		
	2	С		CONTAINMENT SPRAY ADDITIVE TANK TK-36 VACUUM BREAKER		
1-CTS-110	2	С	CTS	CONTAINMENT SPRAY ADDITIVE TANK TK-36 VACUUM BREAKER		
2-CTS-109	2	С	CTS	CONTAINMENT SPRAY ADDITIVE TANK TK-36 VACUUM BREAKER		
2-CTS-110	2	С	CTS	CONTAINMENT SPRAY ADDITIVE TANK TK-36 VACUUM BREAKER		

FUNCTION:

These check valves function as vacuum breakers for the spray additive tanks. These valves are required to open shortly after pressure reversal at the onset of vacuum in the spray additive tank. They reclose upon tank repressurization.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

The spray additive tank vacuum breakers are normally closed to maintain the spray additive tank nitrogen cover gas pressure. These valves are simple check valves. Since there is no set pressure specified, verifying freedom of movement with no noticeable resistance assures the valves will open shortly after pressure reversal at the onset of vacuum in the tank and reclose upon tank repressurization. Testing is accomplished by using a force gauge and a push rod to manually open the valve.

The spray additive tank contains sodium hydroxide. Effects from inhalation of dust or mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Contact with skin can cause irritation or severe burns and scarring with greater exposures. Sodium hydroxide causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness. The added benefit of performing the testing of the spray additive tank vacuum breakers quarterly is far out weighed by the safety hazards involved with working with sodium hydroxide.

ALTERNATE TESTING:

These valves are full stroke exercised, verifying open capability during cold shut down periods in accordance with OM Code ISTC-3522 and 5221(b).

Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

CSJ-007

Component ID	Class	Cat.	System	Label
1-QRV-111	1	В	CVCS	REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF VALVE
1-QRV-112	1	В	CVCS	REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF VALVE
2-QRV-111	1	B	CVCS	REACTOR COOLANT NORMAL LETDOWN TRAIN 'A' SHUTOFF
2-QRV-112	1	B	CVCS	REACTOR COOLANT NORMAL LETDOWN TRAIN 'B' SHUTOFF

FUNCTION:

These valves are in the normal letdown line from Reactor Coolant System Loop 4 to the Chemical Volume Control System (CVCS) regenerative heat exchanger. These normally-open valves close automatically on a LOW level signal derived from the pressurizer-level control system to prevent uncovering of the heater elements in the pressurizer.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These valves are in the normal letdown line from the Reactor Coolant System Loop 4 to the CVCS Regenerative Heat Exchanger. Exercising these valves during power operation would require the isolation of letdown which could result in a loss of pressurizer level control causing a reactor trip.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.



Component ID Class Cat. System Label

FUNCTION:

CSJ-008 was replaced with ROJ-021 by Revision 1 of the 3rd Ten Year Interval IST Program. This number was not reused for the 4th Ten Year Interval IST Program.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

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ATEP AMERICAN* ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

CSJ-009

Component ID	Class	Cat.	System	Label
1-QCR-300	2	Α	CVCS	REACTOR COOLANT LETDOWN TRAIN 'B' CONTAINMENT
1-QCR-301	2	Α	CVCS	REACTOR COOLANT LETDOWN TRAIN 'A' CONTAINMENT
2-QCR-300	2	Α.	CVCS	REACTOR COOLANT LETDOWN TRAIN 'B' CONTAINMENT
2-QCR-301	2	Α	CVCS	REACTOR COOLANT LETDOWN TRAIN 'A' CONTAINMENT

FUNCTION:

These valves are the air operated containment isolation valves located on the letdown line.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These air operated containment isolation valves are located on the letdown line. Exercising these valves during power operation would require the isolation of letdown which could result in a loss of pressurizer level control causing a reactor trip.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.

Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-010

Component ID	Class	Cat.	System	Label
1-QMO-200	2	В	CVCS	CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'A' SHUTOFF VALVE
1-QMO-201	2	В	CVCS	CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'B' SHUTOFF VALVE
2-QMO-200	2	В	CVCS	CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'A' SHUTOFF VALVE
2-QMO-201	2	В	CVCS	CVCS CHARGING TO REGENERATIVE HEAT EXCHANGER TRAIN 'B' SHUTOFF VALVE

FUNCTION:

These normally open motor operated valves provide a flow path for boration and makeup to the reactor coolant system. These valves have an active safety function in the closed position to isolate the normal charging flow path to prevent diversion of emergency core cooling flow from the boron injection tank flow path and charging flow to the Reactor Coolant Pump (RCP) seals via the RCP Seal Injection Water System.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are installed on the Chemical and Volume Control system charging line which provides borated water for reactor coolant chemical shim control and reactor coolant system makeup. Isolation of this system would result in loss of pressurizer level control potentially causing a reactor trip.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.



Component ID	Class	Cat.	System	Label
1-QMO-451	3	В	CVCS	REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO
				CVCS CHARGING PUMPS TRAIN 'A' SHUTOFF VALVE
1-QMO-452	3	В	CVCS	REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO
				CVCS CHARGING PUMPS TRAIN 'B' SHUTOFF VALVE
2-QMO-451	3	В	CVCS	REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO
				CVCS CHARGING PUMPS TRAIN 'A' SHUTOFF VALVE
2-QMO-452	3	В	CVCS	REACTOR COOLANT LETDOWN VOLUME CONTROL TANK TK-10 TO
				CVCS CHARGING PUMPS TRAIN 'B' SHUTOFF VALVE

FUNCTION:

Volume Control Tank (VCT) outlet isolation valves QMO-451 and QMO-452 are normally-open motor operated gate valves and are located in series in the discharge header of the VCT to the charging pumps suction header. The valves CLOSE on a safety injection signal and refueling water sequence.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves function as volume control tank isolation valves. Exercising these valves during power operation would result in loss of suction to the charging pumps.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.



CSJ-012

Component ID	Class	Cat.	System	Label
1-CS-427N	3	С	CVCS	NORTH BORIC ACID FILTER QC-12 TO CVCS CHARGING PUMPS CHECK VALVE
2-CS-427S	3	С	CVCS	SOUTH BORIC ACID FILTER QC-12 TO CVCS CHARGING PUMPS CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide an emergency boration flow path to the reactor coolant system which may be required in the event of: (a) a Lo-Lo control rod insertion alarm, (b) failure of a control rod to drop following a reactor trip, (c) an uncontrolled reactor coolant cooldown following a reactor trip or, (d) any unexplained or uncontrolled reactivity increase.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves are located in the emergency boration flow path. The valves cannot be tested during power without inserting large amounts of negative reactivity which would result in a unit shutdown.

ALTERNATE TESTING:

These valves are full-stroke exercised verifying open capability during cold shutdown in accordance with OM Code ISTC-3522 and 5221.



Component ID	Class	Cat.	System	Label
1-ECR-36	2	A	PAS	CNTMT LOWER COMPT RADIATION DETECTORS ERS-1300 AND
				ERS-1400 SAMPLE RETURN HEADER CNTMT ISOL VALVE
2-ECR-36	2	A	PAS	CNTMT LOWER COMPT RADIATION DETECTORS ERS-2300 AND
				ERS-2400 SAMPLE RETURN HEADER CNTMT ISOL VALVE

FUNCTION:

These valves are the containment isolation valves for the Lower Containment Radiation Monitors. These valves close upon initiation of a Phase B Isolation Signal.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These valves are located in the common sample return line of the lower containment radiation monitors. They cannot be part- or full-stroke exercised during power operation or refueling because closure would isolate both trains of radiation monitors, which are required to be operable during Modes 1 through 4 and Mode 6.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.

REFERENCES:

TS Table 3.3.6-1



Component ID Class Cat. System Label

FUNCTION:

CSJ-014 was deleted per Revision 2 of the 3rd Ten Year Interval IST Program. This number was not reused for the 4th Ten Year Interval IST Program.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

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CSJ-015

Component ID	Class	Cat.	System	Label
1-FRV-210	0	В	FW	STEAM GENERATOR OME-3-1 FEEDWATER REGULATING VALVE
1-FRV-220	0	В	FW	STEAM GENERATOR OME-3-2 FEEDWATER REGULATING VALVE
1-FRV-230	0	В	FW	STEAM GENERATOR OME-3-3 FEEDWATER REGULATING VALVE
1-FRV-240	0	В	FW	STEAM GENERATOR OME-3-4 FEEDWATER REGULATING VALVE
2-FRV-210	0	В	FW	STEAM GENERATOR OME-3-1 FEEDWATER REGULATING VALVE
2-FRV-220	0	В	FW	STEAM GENERATOR OME-3-2 FEEDWATER REGULATING VALVE
2-FRV-230	0	В	FW	STEAM GENERATOR OME-3-3 FEEDWATER REGULATING VALVE
2-FRV-240	0:	В	FW	STEAM GENERATOR OME-3-4 FEEDWATER REGULATING VALVE

FUNCTION:

These throttled open air operated regulating valves are the main feedwater control valves. These valves are used to control steam generator water level. The feedwater regulating valves close on a feedwater isolation signal. The feedwater regulating valves have an active safety function in the closed position for steam generator isolation.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These throttled open air operated regulating valves are the main feedwater control valves. These valves can not be full-stroke exercised during power operation because this would require securing feedwater flow to a steam generator which could result in a reactor trip.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.

REFERENCES:

1 OF 1

ALEP AMERICAN" ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-016

Component ID	Class	Cat.	System	Label	
1-MS-108-2	3	С	MS	STEAM GENERATOR OME-3-2 STEAM TO AUXILIARY FEED PUMP	
				TURBINE CHECK VALVE	
1-MS-108-3	3	С	MS	STEAM GENERATOR OME-3-3 STEAM TO AUXILIARY FEED PUMP	
				TURBINE CHECK VALVE	
2-MS-108-2	3	С	MS	STEAM GENERATOR OME-3-2 STEAM TO AUXILIARY FEED PUMP	
				TURBINE CHECK VALVE	
2-MS-108-3	3	С	MS	STEAM GENERATOR OME-3-3 STEAM TO AUXILIARY FEED PUMP	
				TURBINE CHECK VALVE	

FUNCTION:

The Steam Generator to Auxiliary Feedwater Pump Turbine Check Valves have an active safety function in the open position to provide the steam supply to the auxiliary feedwater pump turbine. These check valves have an active safety function in the closed position to prevent diversion of steam flow in the event of an upstream piping failure.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves cannot be full stroke exercised open during power operation without energizing the Auxiliary Feedwater System and delivering cold water to the steam generators. This would result in thermal shock to the steam generator nozzles and potential increase in reactor power due to the introduction of the colder water.

These check valves are not installed with upstream test connections to facilitate the verification of valve closure upon reversal of flow. These valves are of the nozzle check valve design and are equipped with a test port. This test port is designed for the use of a position indicator assembly. Testing of the valve requires that the valve be completely depressurized, test port removed and the position indicator assembly installed. This requires the isolation, cooldown and depressurization of both steam supplies to the turbine driven auxiliary feedwater pump.

ALTERNATE TESTING:

These valves are full-stroke exercised verifying open capability during plant startup following a cold shutdown period in accordance with OM Code ISTC-3522 and 5221.

These valves are full-stroke exercised verifying closed capability during cold shutdown in accordance with OM Code ISTC-3522 and 5221.

REFERENCES:

CR P-99-28689



CSJ-017

Component ID	Class	Cat.	System	Label
1-MRV-210	2	В	MS	STEAM GENERATOR OME-3-1 STOP VALVE
1-MRV-220	2	В	MS	STEAM GENERATOR OME-3-2 STOP VALVE
1-MRV-230	2	В	MS	STEAM GENERATOR OME-3-3 STOP VALVE
1-MRV-240	2	В	MS	STEAM GENERATOR OME-3-4 STOP VALVE
2-MRV-210	2	В	MS	STEAM GENERATOR OME-3-1 STOP VALVE
2-MRV-220	2	в	MS	STEAM GENERATOR OME-3-2 STOP VALVE
2-MRV-230	2	В	MS	STEAM GENERATOR OME-3-3 STOP VALVE
2-MRV-240	2	В	MS	STEAM GENERATOR OME-3-4 STOP VALVE

FUNCTION:

These valves have an active safety function in the closed position to provide steam header isolation in the event of a steam generator failure or steam line rupture. The valves provide isolation capabilities of unaffected steam generators to preclude blowdown of more than one steam generator.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These steam generator stop valves cannot be full-stroke exercised during power operation because this would require securing steam from a steam generator which could result in a reactor trip. Three loop operation is not allowed per Technical Specification 3.4.4.

These valves are equipped with components and circuitry to perform partial stroke exercise testing. The valves will not be part stroke exercised quarterly based on the guidance from NUREG-1482, Revision 1, Section 4.2.6, Note: Related to Main Steam Isolation valves (MSIV), a number of plants perform a partial-stroke exercise quarterly during power operations. The revised standard techncial specifications bases for MSIV surveillance requirements states that "MSIVs should not be tested at power, since even a part-stroke exercise increases the risk of a valve closure when the unit is generating power."

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time and fail-safe operation in the closed direction following a cold shutdown period and Tavg greater than or equal to 541oF in accordance with OM Code ISTC-3521 and 3560.

REFERENCES:

NUREG-1482, Rev. 1, 4.2.6 USFAR 10.2.4 TS 3.7.2 TS Basis 3.7.2 ALEP AMERICAN® ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-018

Component ID 1-CA-554	Class	Cat	System CAS	Label	
	0	С		CONTAINMENT 85 PSI CONTROL AIR RING HEADER #2 TO	
1-CA-565	0	С	CAS	CONTAINMENT 85 PSI CONTROL AIR RING HEADER #2 TO	
2-CA-711	0	С	CAS	CONTROL VALVE NRV-152 CHECK VALVE CONTAINMENT 85 PSI CONTROL AIR RING HEADER #2 TO	
2-CA-713	0	С	CAS	CONTROL VALVE NRV-152 CHECK VALVE CONTAINMENT 85 PSI CONTROL AIR RING HEADER #TO CONTROL	
2-CA-713	0	С	CAS	CONTAINMENT 85 PSI CONTROL AIR RING HEADER #10 CONTROL VALVE NRV-153 CHECK VALVE	

FUNCTION:

The Compressed Air System provides clean, dry, oil-free instrument and control air to air-operated valves in the Reactor Coolant System, including the pressurizer Power Operated Relief Valves (PORVs). This system also supplies back-up air to the two low temperature over pressurization (LTOP) PORVs (NRV-152 and NRV-153) to ensure operability in the event of loss of control air. The back-up air supply consists of compressed air bottles. These check valves have an active safety function in the closed position to prevent diversion of the backup air supply in the event that the normal air supply is not available.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

The testing of these check valves requires the stroking of the PORVs. These valves will be tested at cold shutdown or at least once per fuel cycle when exercising the pressurizer PORVs. In accordance with ISTC-3510, power-operated relief valves shall be tested once per fuel cycle.

ALTERNATE TESTING:

These check valves are full stroke exercised, verifying closed capability during cold shut down periods or once each fuel cycle in accordance with OM Code ISTC-3510 and 5221.

REFERENCES:

Generic Letter 90-06 TS 3.4.11 TS 3.4.12

Revision 4

1 OF 1



Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

CSJ-019

Component ID	Class	Cat.	System	Label
1-NSO-21	2	В	RCS	REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE
1-NSO-22	2	В	RCS	REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE
1-NSO-23	2	В	RCS	REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE
1-NSO-24	2	в	RCS	REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE
1-NSO-61	2	В	RCS	PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE
1-NSO-62	2	В	RCS	PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE
1-NSO-63	2	В	RCS	PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID
1-NSO-64	2	В	RCS	PRESSURIZER OME-4 POST-ACCÍDENT VENT TRAIN 'B' SOLENOID
2-NSO-21	2	В	RCS	REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A'
2-NSO-22	2	В	RCS	REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'A'
2-NSO-23	2	В	RCS	REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE
2-NSO-24	2	В	RCS	REACTOR VESSEL OME-1 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE
2-NSO-61	2	В	RCS	PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID VALVE
2-NSO-62	2	В	RCS	PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'A' SOLENOID
2-NSO-63	2	В	RCS	PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE
2-NSO-64	2	В	RCS	PRESSURIZER OME-4 POST-ACCIDENT VENT TRAIN 'B' SOLENOID VALVE

FUNCTION:

These solenoid operated isolation valves are installed (two in each leg in series) in the reactor head vent (NSO-2x series) and the pressurizer vent (NSO-6x series). These normally closed solenoid valves have an active safety function in the open position to vent steam and non-condensable gasses from the reactor coolant system after an accident. These valves have an active safety function in the closed position and are required to fail closed on a loss of control power to prevent excessive loss of reactor coolant. These valves serve as reactor coolant pressure boundary valves.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

Revision 4



CSJ-019

These valves cannot be tested during power operation, hot standby, or hot shutdown since the valve design is such that testing of either valve can cause momentary opening of the second valve, resulting in the release of radioactive fluid creating an airborne condition in containment.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closed stroke times and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.

REFERENCES:

Technical Requirements Manual 8.4.4

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Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-020

Component ID	Ciass	Cat.	System	Label
1-RH-108E	2	С	RHR	EAST RESIDUAL HEAT REMOVAL PUMP PP-35E DISCHARGE CHECK VALVE
1-RH-108W	2	С	RHR	WEST RHR PUMP DISCHARGE CHECK VALVE
2-RH-108E	2	С	RHR	EAST RESIDUAL HEAT REMOVAL PUMP PP-35E DISCHARGE CHECK VALVE
2-RH-108W	2	С	RHR	WEST RHR PUMP DISCHARGE CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path for Residual Heat Removal (RHR) cooling and low head safety injection (LHSI). These valves must be capable of passing the flow rate required for decay heat removal and LHSI. These check valves have an active safety function in the closed position to prevent diversion of flow if the upstream RHR pump is idle and the RHR pump discharge headers are crosstied and to maintain the RHR header during swap over to recirculation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be full-stroke exercised quarterly since the RHR pumps cannot develop full flow on the minimum flow recirculation circuit. Flow to the core is not possible when the reactor coolant system pressure is above the shutoff head of the RHR Pumps. The valves will be full-stroke exercised during cold shutdown.

ALTERNATE TESTING:

These valves are full-stroke exercised verifying open and closed capability at cold shutdown frequency in accordance with OM Code ISTC-3522 and 5221.

REFERENCES:

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CSJ-021

Component ID	Class Cat.		System	Label	
1-IMO-261	2	Α	SI	REFUELING WATER STORAGE TANK TK-33 SUPPLY TO SAFETY	
				INJECTION PUMPS SHUTOFF VALVE	
2-IMO-261	2	Α	SI	REFUELING WATER STORAGE TANK TK-33 SUPPLY TO SAFETY	
				INJECTION PUMPS SHUTOFF VALVE	

FUNCTION:

These normally open motor operated valves have a passive safety function in the open position to provide suction for the High Head Safety Injection (HHSI) pumps from the refueling water storage tanks (RWST). The RWST is the safety-related suction source for the Safety Injection (SI) pumps during the injection phase of emergency core cooling. These valves have an active safety function in the closed position to isolate the RWST when the SI pumps are realigned to take suction from the containment sump, via the Residual Heat Removal system) during the recirculation phase of safety injection following a loss-of-coolant accident.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are the suction isolation valves for the high head safety injection pumps from the refueling water storage tanks. These valves cannot be tested when the safety injection pumps are required to be operable as the testing would result in isolation of the common suction line, rendering the safety injection system inoperable.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

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Component ID	Class	Cat.	System	Label		
1-IMO-262	2	Α	SI	SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER		
				STORAGE TANK TK-33 TRAIN 'A' SHUTOFF VALVE		
1-IMO-263	2	Α	SI	SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER		
				STORAGE TANK TK-33 TRAIN 'B' SHUTOFF VALVE		
2-IMO-262	2	Α	SI	SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER		
				STORAGE TANK TK-33 TRAIN 'A' SHUTOFF VALVE		
2-IMO-263	2	Α	SI	SAFETY INJECTION PUMPS RECIRC TO REFUELING WATER		
				STORAGE TANK TK-33 TRAIN 'B' SHUTOFF VALVE		

FUNCTION:

These normally open motor operated valves have a passive safety function in the open position to provide a flow path for safety injection pump minimum recirculation flow. Recirculation flow is necessary to prevent pump damage when operating under shutoff head or low flow conditions. These valves have an active function in the closed position to enable switchover of the Emergnecy Core Cooling systems from the injection mode of operation to the recirculation mode after the refueling water storage tank inventory is reduced to the minimum allowable.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are located in series in the recirculation line of the safety injection pumps. Exercising either of the valves during plant operation would render both safety injection pumps inoperable.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

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CSJ-023

Component ID	Class	Cat.	System	Label
1-IMO-315	1	В	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOPS #1 AND #4 HOT LEGS SHUTOFF VALVE
1-IMO-325	1	В	SI	WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR
				COOLANT LOOPS #2 AND #3 HOT LEGS SHUTOFF VALVE
2-IMO-315	1	В	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOPS #1 AND #4 HOT LEGS SHUTOFF VALVE
2-IMO-325	. 1	В	SI	WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR
				COOLANT LOOPS #2 AND #3 HOT LEGS SHUTOFF VALVE

FUNCTION:

These normally closed motor operated valves have an active safety function in the open position to provide a flow path for safety injection from the high head safety injection pumps and the low head safety injection pumps to the reactor coolant loop hot legs. The safety injection system is switched from the injection mode (suction from the refueling water storage tank (RWST)) to the recirculation mode (suction from the containment sump) after the RWST inventory is reduced to the minimum permissible and sufficient liquid has accumulated in the containment sump to provide the required suction head for the residual heat removal pumps. Recirculation flow is initially directed to the reactor coolant cold legs. The switch to hot leg recirculation is made approximately 7 hours after event initiation to ensure reactor core subcooling and to prevent boron precipitation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are normally closed valves located in the residual heat removal and safety injection supply header to the reactor coolant system hot legs. The valves should not be exercised during power operation because failure in a non-conservative position would result in less than the minimum number of injection flow paths as required by the UFSAR.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

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Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-024

Component ID	Class	Cat.	System	Label
1-IMO-316	2	В	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOPS #1 AND #4 COLD LEGS SHUTOFF VALVE
1-IMO-326	2	В	SI	WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR
				COOLANT LOOPS #2 AND #3 COLD LEGS SHUTOFF VALVE
2-IMO-316	2	В	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOPS #1 AND #4 COLD LEGS SHUTOFF VALVE
2-IMO-326	2	в	SI	WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR
	_	_		COOLANT LOOPS #2 AND #3 COLD LEGS SHUTOFF VALVE

FUNCTION:

These normally open motor operated valves have an active safety function in the open position to provide a flow path for safety injection from the high head safety injection pumps and the low head safety injection pumps to the reactor coolant loop cold legs. These valves have an active safety function in the closed position to prevent diversion of post loss-of-coolant accident (LOCA) emergency core cooling system flow from the reactor coolant loop hot legs during the hot leg recirculation phase of safety injection. These valves must close to switch the alignment of the high head and low head safety injection pump flows from the reactor coolant cold legs to the reactor coolant hot legs. The switch to the hot leg recirculation mode is made approximately 7 hours after event initiation to ensure reactor core subcooling and to prevent boron precipitation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These values are normally open values located in the residual heat removal and safety injection supply header to the reactor coolant system hot legs. The values should not be exercised during power operation because failure in a non-conservative position would result in less than the minimum number of infection flow paths as required by the UFSAR.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

1 OF 1



Component ID Class Cat. System Label

FUNCTION:

CSJ-025 was replaced by ROJ-022 in Revision 1 of the 3rd Ten Year Interval IST Program. This number was not reused for the 4th Ten Year Interval IST Program.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

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Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-026

Component ID 1-IMO-340	Class Cat.		System	Label	
	2	В	RHR	EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER TO CHARGING	
				PUMPS SUCTION SHUTOFF VALVE	
1-IMO-350	2	В	RHR	WEST RHR HEAT EXCHANGER OUTLET TO SAFETY INJECTION	
				PUMP SUCTION SHUTOFF VALVE	
2-IMO-340	2	В	RHR	EAST RESIDUAL HEAT REMOVAL HEAT EXCHANGER TO CHARGING	
				PUMPS SUCTION SHUTOFF VALVE	
2-IMO-350	2	В	RHR	WEST RHR HEAT EXCHANGER OUTLET TO SAFETY INJECTION	
				PUMP SUCTION SHUTOFF VALVE	

FUNCTION:

These normally closed isolation valves have an active safety function in the open position to provide a suction flow path to the centrifugal charging (CC) pumps or the safety injection (SI) pumps from the outlet of residual heat removal (RHR) heat exchangers HE-17E/W during the recirculation phase of emergency core cooling system operation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are located in the east and west RHR discharge headers to the suction of the charging (IMO-340) and SI (IMO-350) pumps. These valves are normally closed during power operation, and would be opened during the recirculation phase of a loss-of-coolant accident to allow the RHR pumps to provide water from the containment sump to the CC and SI pumps. These valves cannot be full-stroke exercised during power operation because they are interlocked with valves IMO-262, -263, located in series, in the SI pump mini flow line to the Refueling Water Storage Tank. Closing IMO-262, -263 would render both SI pumps inoperable and place the unit in TS LCO 3.0.3 which allows one hour to restore the SI pumps to operable status or begin unit shutdown. The complicated valve and equipment lineup to perform the valve testing in one hour is highly unlikely.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

AEP:NRC:09690

Revision 4



Component ID Class Cat. System Label

FUNCTION:

CSJ-027 was deleted. This number was not reused for the 4th Ten Year Interval IST Program.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

ATER AMERICAN® ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-028

Component ID	Class	Cat.	System	Label	
1-IMO-390	2	В	SI	REFUELING WATER STORAGE TANK TK-33 TO RESIDUAL HEAT	-
				REMOVAL PUMPS SUCTION SHUTOFF VALVE	
2-IMO-390	2	в	SI	REFUELING WATER STORAGE TANK TK-33 TO RESIDUAL HEAT	
				REMOVAL PUMPS SUCTION SHUTOFF VALVE	

FUNCTION:

These normally open motor operated valves have a passive safety function in the open position to provide a suction flow path for the low head safety injection pumps from the refueling water storage tank (RWST). These valves have an active safety function in the closed position to isolate the RWST when the low head safety injection pumps are realigned to take suction from the containment sump during the recirculation phase of safety injection following a loss-of-coolant accident. These valves must also be capable of closure to align the residual heat removal (RHR) pump suctions to the reactor coolant system for normal shutdown cooling.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are the isolation valves in the RHR common suction lines from the RWST. The common suction line of the RHR pumps from the RWST is required to be operable during power operation and testing of these valves would require isolation of this line.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

1 OF 1

Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-029

Component ID	Class	Cat.	System	Label
1-IMO-51	2	В	SI	BORON INJECTION TO REACTOR COOLANT LOOP #1 SHUTOFF VALVE
1-IMO-52	2	В	SI	BORON INJECTION TO REACTOR COOLANT LOOP #2 SHUTOFF VALVE
1-IMO-53	2	В	SI	BORON INJECTION TO REACTOR COOLANT LOOP #3 SHUTOFF VALVE
1-IMO-54	2	В	SI	BORON INJECTION TO REACTOR COOLANT LOOP #4 SHUTOFF
2-IMO-51	2	В	Si	BORON INJECTION TO REACTOR COOLANT LOOP #1 SHUTOFF
2-IMO-52	2	Β.	SI	BORON INJECTION TO REACTOR COOLANT LOOP #2 SHUTOFF
2-IMO-53	2	В	SI	BORON INJECTION TO REACTOR COOLANT LOOP #3 SHUTOFF
2-IMO-54	2	В	SI	BORON INJECTION TO REACTOR COOLANT LOOP #4 SHUTOFF VALVE

FUNCTION:

These normally open motor operated valves have a passive safety function in the open position to provide a flow path for centrifugal charging (CC) pump emergency core cooling system (ECCS) injection to the associated reactor coolant loop cold leg. These valves have an active safety function in the closed position to, 1) isolate flow to the broken reactor coolant system (RCS) loop, 2) prevent flow loss from the broken injection line due to passive failure in the recirculation phase and 3) to prevent back flow from the RCS in case of a check valve failure in the injection line down stream of these valves during the long term cooling when the CC pumps have been secured. IMO-51 and 53 are Train A and IMO-52 and 54 are Train B valves.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are the Boron Injection to Reactor Coolant Cold Leg Shutoff Isolation Valves. These valves are normally open and perform a passive open safety function to provide a flow path from the Charging Pumps to the RCS Cold Legs. All 4 lines must be open to satisfy this requirement. These valves can not be tested during power operations because each motor-operated valve would have to be stroke timed closed. This action can not be performed at power, and due to this restraint, these valves can not be partially stroked during power operations as well.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time in the closed direction during cold shutdown in accordance with OM Code ISTC-3521.

Note: These valves are excluded from GL 89-10 Program scope. Therefore Code Case OMN-1 will not be applied.

REFERENCES:

TS 3.5.2 and 3.5.3



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2.



Component ID Class Cat. System Label

FUNCTION:

CSJ-030 was deleted in the Fourth 10-Year Interval Update since manual valves no longer require quarterly exercising but are allowed a 2 year exercise interval.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

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Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-031

Component ID	Class	Cat.	System	Label
1-QRV-51	1	В	CVCS	CVCS CHARGING TO PRESSURIZER AUXILIARY SPRAY SHUTOFF VALVE
2-QRV-51	1	В	CVCS	CVCS CHARGING TO PRESSURIZER AUXILIARY SPRAY SHUTOFF

FUNCTION:

These normally closed air operated valves have an active safety function in the open position to provide a flow path for auxiliary pressurizer spray. Auxiliary pressurizer spray is used to bring the plant to cold shutdown when the reactor coolant pumps are not in operation. These valves are required to fail to the closed position to ensure auxiliary pressurizer sprays are isolated following a loss of instrument air or electrical control power. These valves also have an active safety function in the closed position to prevent back flow from the reactor coolant system in the event of a passive upstream component failure.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These valves are normally closed and if opened during power operations would cool down the Pressurizer. These valves are used, in conjunction with CS-325 to cool the pressurizer to bring the plant to cold shutdown. Due to system conditions, this valve cannot be tested quarterly, but can be cycled and tested during cold shutdown.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closed stroke time and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.

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Donald C. Cook Nuclear Plant IST Program

Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

SHOTDOWN JUSTIFIC

CSJ-032

Component ID	Class	Cat.	System	Label
1-CF-126	2	С	FW	FEEDWATER CHEMICAL FEED TO STEAM GENERATOR #2
				CONTAINMENT ISOLATION CHECK VALVE
1-CF-127	2	С	FW	FEEDWATER CHEMICAL FEED TO STEAM GENERATOR #3
				CONTAINMENT ISOLATION CHECK VALVE
1-CF-128	2	С	FW	FEEDWATER CHEMICAL FEED TO STEAM GENERATOR #4
				CONTAINMENT ISOLATION CHECK VALVE
1-CF-129	2	С	FW	FEEDWATER CHEMICAL FEED TO STEAM GENERATOR #1
				CONTAINMENT ISOLATION CHECK VALVE
2-CF-126	2	С	FW	FEEDWATER CHEMICAL FEED TO STEAM GENERATOR #2
				CONTAINMENT ISOLATION CHECK VALVE
2-CF-127	2	С	FW	FEEDWATER CHEMICAL FEED TO STEAM GENERATOR #3
				CONTAINMENT ISOLATION CHECK VALVE
2-CF-128	2	С	FW	FEEDWATER CHEMICAL FEED TO STEAM GENERATOR #4
				CONTAINMENT ISOLATION CHECK VALVE
2-CF-129	2	С	FW	FEEDWATER CHEMICAL FEED TO STEAM GENERATOR #1
				CONTAINMENT ISOLATION CHECK VALVE

FUNCTION:

These check valves have an active safety function in the closed position to isolate the chemical feed line from the main feedwater headers and prevent diversion of auxiliary feedwater flow. The valves represent the ISI class 2 to non-class boundary. The valves have no safety function in the open position.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

In order to test the closed function of these valves the pressure has to be relieved from between the pump and these check valves to determine closure. When this is done, the vented water will flash to steam. Testing these valves at power is a personnel safety hazard.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying closure capability during cold shutdown in accordance with OM Code ISTC-3522 and 5221.

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Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-033

Component ID	Class	Cat	System	Label
1-QRV-251	2	В	CVCS	CVCS CENTRIFUGAL CHARGING PUMPS DISCHARGE FLOW
2-QRV-251	2	В	CVCS	CONTROL VALVE CVCS CENTRIFUGAL CHARGING PUMPS DISCHARGE FLOW CONTROL VALVE

FUNCTION:

This air operated valve has an active safety function in the open position to provide a flow path for boration and makeup to the reactor coolant system to assure plant shutdown capability. The position of QRV-251 is controlled by Pressurizer Level Control; however, this valve is required to fail to the open position on a loss of instrument air or electrical control power. The valve controller prevents the valve from fully closing to ensure a continuous flow of seal injection water to the Reactor Coolant Pump (RCP) No. 1 seals. This valve has no safety function in the closed position.

TEST REQUIREMENT:

1) OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

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

BASIS:

These valves cannot be full-stroke exercised at power operation because it would interrupt the RCP seal injection flow and would also upset pressurizer level. The valve has no local or remote position indication and no remote valve control switch.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closed stroke time and fail-safe operation in the closed direction during cold shutdown in accordance with OM Code ISTC-3521 and 3560.

Valve operation will be observed locally verifying no abnormal or erratic action. Stroke time and fail-safe operation in the open direction will be initiated by the removal of 1(2)-RU-29, CCP Disch Flow Ctrl 1(2)-QRV-251, from the control panel. The valves will be stroked timed locally.

REFERENCES:

SER N97041
ATT AMERICAN* ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-034

Component ID	Class	Cat.	System	Label
1-CCW-215	3	С	CCW	COMPONENT COOLING WATER SURGE TANK TK-37 VACUUM
				BREAKER CHECK VALVE
2-CCW-215	3	С	CCW	COMPONENT COOLING WATER SURGE TANK TK-37 VACUUM
				BREAKER CHECK VALVE

FUNCTION:

These valves are the Component Cooling Water (CCW) Surge Tank TK-37 Vaxuum Breaker Check Valves. These valves must open to accommodate changes in surge volume when CRV-412 is isolated due to high radiation. These valves must also close to prevent release of potentially contaminated CCW volume and to provide the Safety Class 3 pressure boundary.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are located on top of the CCW Surge Tanks which are 12-foot diameter tanks with sloping tops. Access to the valve during plant operation requires scaffolding construction around the tank. To perform this test on a quarterly frequency, introduces the difficulty of erecting seismically qualified scaffolding around operating safety-related equipment with the potential of jeopardizing the safety of the equipment and personnel. NUREG-1482, Rev.1, Section 3.1 provides additional guidance that testing may be deferred for circumstances in which: compliance would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety or the system design makes compliance impractical.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability during cold shutdown in accordance with OM Code ISTC-3522 and 5221.

REFERENCES:

NUREG-1482, Rev. 1, 3.1 NRC Workshop Q&A, dated 7/18/97, 2.4.11

1 OF 1

Donald C. Cook Nuclear Plant IST Program

Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-035

Component ID	Class	Cat.	System	Label
2-ICM-260	2	Α	SI	NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE CONTAINMENT ISOLATION VALVE
2-ICM-265	2	Α	SI	SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE CONTAINMENT ISOLATION VALVE
2-IMO-270	2	В	Si	SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'A' SHUTOFF VALVE
2-IMO-275	2	В	SI	SAFETY INJECTION PUMPS DISCHARGE CROSSTIE TRAIN 'B' SHUTOFF VALVE

FUNCTION:

Valves 2-ICM-260, 2-ICM-265, 2IMO-270 and IMO-275 are normally open motor operated valves which remain open during an accident to provide a flow path for emergency core cooling from the High Head Safety Injection (HHSI) pumps. Remote manual closure capability is available for containment isolation in the event of a break in an associated emergency core cooling line or for isolation of a passive failure associated with a HHSI pump (seal leak).

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

Closing these valves quarterly during power operation is not practical since this would isolate 2 of the 4 HHSI cold leg injection lines, Injection to all 4 cold legs is assumed in the accident analysis, even with a failure of one pump to inject (the cross-tie valves remain open). Closing these valves at 100% power puts the plant in an unanalyzed condition. The reduced flow would cause higher clad tempertures. Analysis does show acceptable core performance if power is reduced to 3250 MWth (94%).

The OM Code permits deferring valve testing to a cold shutdown frequency if exercising is not practical during plant operation. NUREG 1482, Rev. 1, provides additional guidance on what constitutes impractical conditions justifying test deferrals. Section 2.4.5 states "Impractical conditions justifying test deferrals may include the following situations that could result in an unnecessary plant shutdown, cause unnecessary challenges to safety systems, place undue stress on components, cause unnecessary cycling of equipment, or unnecessarily reduce the life expectancy of the plant systems and components." Section 3.1.1 identifies "All valves that would cause a loss of system function if they were to fail in a nonconservative position during the cycling test" as an example of valves to be specifically excluded from exercising (cycling) tests during plant operations. Failure of these valves in the closed position during exercising would render the Safety Injection System inoperable and force a plant shutdown. Also, requiring the plant to go through an involved evolution to reduce power to 94% to exercise these valves quarterly qualifies as an undue burden without a compensating increase in the level of quality and safety.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

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Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-035

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Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

CSJ-036

Component ID	Class	Cat.	System	Label
1-CRV-470	3	В	CCW	LETDOWN HEAT EXCHANGER HE-14 COMPONENT COOLING
				WATER OUTLET CONTROL VALVE
2-CRV-470	3	В	CCW	LETDOWN HEAT EXCHANGER HE-14 COMPONENT COOLING
				WATER OUTLET CONTROL VALVE

FUNCTION:

These valves are normally in service during power operation. These valves are controlled by an auto/manual station with auto input from the letdown heat exchanger outlet temperature sensor. The letdown line from the reactor coolant system is isolated during accident conditions by a phase A containment isolation signal. The operation of the letdown heat exchanger is not required to mitigate the consequences of an accident or to bring the plant to a safe shutdown condition. The valve will be full-stroke exercised quarterly using the auto/manual station which will permit rapid cycling and result in minimal impact on letdown temperature. These valves are not equipped with local or remote position indication.

TEST REQUIREMENT:

OM Code ISTC-3560 requires valves with fail-safe actuators to be tested by observing the operation of the actuator upon loss of valve actuating power nominally every 3 months, per ISTC-3510.

BASIS:

These valves are full-stroke exercised quarterly using the auto/manual station which permits rapid cycling and results in minimal impact on letdown temperature. The performance of fail safe testing requires the opening of Circuit #23 on Panel 1(2)-VDCD-2. Performing this test with with letdown in service may cause high letdown line temperatures that could cause flashing of the letdown heat exchanger and lifting of safety valves.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying stroke time and fail-safe operation locally in the closed direction during cold shutdown in accordance with OM Code, ISTC-3521 and ISTC-3560.

REFERENCES:

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Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION

CSJ-037

Component ID	Class	Cat.	System	Label		
1-FMO-201	0	В	FW	STEAM GENERATOR OME-3-1 FEEDWATER SHUTOFF VALVE		
1-FMO-202	0	В	FW	STEAM GENERATOR OME-3-2 FEEDWATER SHUTOFF VALVE		
1-FMO-203	0	В	FW	STEAM GENERATOR OME-3-3 FEEDWATER SHUTOFF VALVE		
1-FMO-204	0	В	FW	STEAM GENERATOR OME-3-4 FEEDWATER SHUTOFF VALVE		
2-FMO-201	0	B	FW	STEAM GENERATOR OME-3-1 FEEDWATER SHUTOFF VALVE		
2-FMO-202	0	В	FW	STEAM GENERATOR OME-3-2 FEEDWATER SHUTOFF VALVE		
2-FMO-203	0	В	FW	STEAM GENERATOR OME-3-3 FEEDWATER SHUTOFF VALVE		
2-FMO-204	0	в	FW	STEAM GENERATOR OME-3-4 FEEDWATER SHUTOFF VALVE		

FUNCTION:

These normally open, motor operated, feedwater isolation valves have an active safety function in the closed position to isolate the feedwater headers. These valves have no safety function in the open position. The feedwater isolation valves, located downstream of the feedwater regulating valves, close on a feedwater isolation signal (safety injection signal), thereby isolating the steam generator.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These feedwater isolation valves cannot be full-stroke exercised during power operation because this would require securing feedwater to a steam generator which would result in a reactor trip.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

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Donald C. Cook Nuclear Plant IST Program

Fourth Ten Year Interval

COLD SHUTDOWN JUSTIFICATION

CSJ-038

Component ID	Class	Cat.	System	Label
1-ICM-111	2	В	RHR	RHR TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS
				CONTAINMENT ISOLATION VALVE
1-ICM-129	1	Α	RHR	REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT
				REMOVAL PUMPS SUCTION CONTAINMENT ISOLATION VALVE
1-IMO-128	1	Α	RHR	REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT
				REMOVAL PUMPS SUCTION SHUTOFF VALVE
2-ICM-111	2	В	RHR	RHR TO REACTOR COOLANT LOOPS #2 & #3 COLD LEGS
				CONTAINMENT ISOLATION VALVE
2-ICM-129	1	Α	RHR	REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT
				REMOVAL PUMPS SUCTION CONTAINMENT ISOLATION VALVE
2-IMO-128	1	Α	RHR	REACTOR COOLANT LOOP #2 HOT LEG TO RESIDUAL HEAT
				REMOVAL PUMPS SUCTION SHUTOFF VALVE

FUNCTION:

ICM-111

These motor operated isolation valves have an active safety significant function in the open position to provide a flow path to the Reactor Coolant System (RCS) for reactor cooldown and decay heat removal in Operational Modes 4, 5, and 6. Although achieving cold shutdown is considered beyond design basis since Donald C. Cook is licensed as a hot shutdown plant, these valves will be timed to the open position as good engineering judgement. They are closed except when the Residual Heat Removal (RHR) system is in operation. The circuit breaker for the valve motor is racked out during normal operation to prevent inadvertent opening. These valves have an active safety function in the closed position for containment isolation but do not receive an automatic actuation signal.

ICM-129

These motor operated isolation valves have an active safety function in the open position to provide a suction flow path for the RHR pumps from the reactor coolant system for reactor decay heat removal in Operational Modes 4, 5, and 6. These valves are normally closed except when the RHR system is in operation. Although achieving cold shutdown is considered beyond design basis since Donald C. Cook is licensed as a hot shutdown plant, these valves will be timed to the open position as good engineering judgement. These valves have an active safety function in the closed position for containment isolation and pressure isolation. To protect the RHR system from overpressurization, these valves are interlocked to prevent opening when the RCS pressure is greater than 400 psig and close automatically (if open) when the RCS pressure reaches 600 psig.

IMO-128

These motor operated isolation valves have an active safety function in the open position to provide a suction flow path for the RHR pumps from the reactor coolant system for reactor decay heat removal in Operational Modes 4, 5, and 6. These valves are normally closed except when the RHR system is in operation. Although achieving cold shutdown is considered beyond design basis since Donald C. Cook is licensed as a hot shutdown plant, these valves will be timed to the open position as good engineering judgement. These valves have an active safety function in the closed position for pressure isolation. To protect the RHR system from overpressurization, this valve is interlocked to prevent opening when the RCS pressure is greater than 400 psig and it closes automatically (if open) when the RCS pressure reaches 600 psig.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

Revision 4



Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-038

BASIS:

ICM-111, ICM-129, IMO-128: These valves are normally open or closed to provide flow paths or isolation capability during emergency core cooling system (ECCS) injection. These valves can not be full or part stroked during power operations because testing these valves would require the ECCS injection flow path to the RCS to be inoperable. These valves can not be full or part stroked during shutdown cooling operations because testing these valves during shutdown cooling operations because testing these valves would require shutdown cooling to be secured; however, they can be stroked prior to placing RHR in service for shutdown cooling.

ALTERNATE TESTING:

ICM-111

These valves are full-stroke exercised, verifying stroke time in the open and closed direction during cold shutdown in accordance with OM Code ISTC-3521.

Note: These valves are excluded from GL 89-10 Program scope. Therefore Code Case OMN-1 will not be applied.

ICM-129, IMO-128

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:



Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval COLD SHUTDOWN JUSTIFICATION CSJ-039

Component ID 1-IMO-255	Class	Cat.	System Sl	Label		
	2	В		BORON INJECTION TANK TRAIN 'A' INLET SHUTOFF VALVE		
1-IMO-256	2	В	SI	BORON INJECTION TANK TRAIN 'B' INLET SHUTOFF VALVE		
2-IMO-255	2	В	SI	BORON INJECTION TANK TRAIN 'A' INLET SHUTOFF VALVE		
2-IMO-256	2	В	SI	BORON INJECTION TANK TRAIN 'B' INLET SHUTOFF VALVE		

FUNCTION:

These normally closed motor operated valves have an active safety function to open to provide a flow path for the centrifugal charging pumps to inject into the reactor coolant loop cold legs.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

Boron Injection Tank (BIT) inlet valves 1-IMO-255, 1-IMO-256, 2-IMO-255 and 2-IMO-256 are normally closed motor operated valves which open during an accident to provide a flow path for emergency core cooling from the centrifugal charging pumps.

Investigation into a Reactor Coolant Pump (RCP) seal water injection flow anomaly identified that stroking these valves will have an effect on the charging header pressure as well as the RCP seal water injection flow rates. The magnitude of this effect is increased as the differential pressure between the initial BIT pressure and the charging header pressure is increased.

Two options were evaluated to pressurize the BIT including use of Chemical and Volume Control System (CVCS) cross-tie valves CS-536 and CS-534 from the same unit, as well as de-clutching one of the BIT inlet valves and manually opening the motor-operated valve (MOV) slowly off the seat. The second option was determined to not be practical due to concerns with damaging the torque switch while attempting to declutch this type of MOV with the valve fully seated. The first option - using the cross- tie header to pressurize the BIT was not a designed purpose for these valves. Use of the cross-tie valves to attempt pressurization of the BIT was determined to create an unjustified risk to plant safety and station reliability.

Because of the effect that stroke testing the BIT inlet valves may have on RCP seal performance if the BIT is depressurized, and because the CVCS has not been equipped with an acceptable method to pressurize the BIT slowly, quarterly full stroke exercise testing for the BIT inlet valves presents a potential for negative impact on the RCP seal performance and is not practical.

ALTERNATE TESTING:

These motor operated valves are full stroke exercised during cold shutdown in accordance with OM Code ISTC-3521. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

CR 04219068



Component ID Class Cat. System Label

FUNCTION:

This ROJ was not assigned in Revision 3 of the 3rd Ten Year Interval IST Program and will remain unassigned during the 4th 10-Year Interval.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

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Component ID	Class	Cat.	System	Label
1-CCW-243-25	2	AC	CCW	CCW TO CONTAINMENT PENETRATIONS CPN-2 & CPN-5 INNER
				COOLING COILS CHECK VALVE
1-CCW-243-72	2	AC	CCW	CCW TO CONTAINMENT PENETRATIONS CPN-3 & CPN-4 INNER
				COOLING COILS CHECK VALVE
1-CCW-244-25	2	AC	CCW	CCW TO CONTAINMENT PENETRATIONS CPN-2 & CPN-5 INNER
				COOLING COILS CHECK VALVE
1-CCW-244-72	2	AC	CCW	CCW TO CONTAINMENT PENETRATIONS CPN-3 & CPN-4 INNER
				COOLING COILS CHECK VALVE
2-CCW-243-25	2	AC	CCW	CCW TO CONTAINMENT PENETRATIONS CPN-2 & CPN-5 INNER
				COOLING COILS CHECK VALVE
2-CCW-243-72	2	AC	CCW	CCW TO CONTAINMENT PENETRATIONS CPN-3 & CPN-4 INNER
				COOLING COILS CHECK VALVE
2-CCW-244-25	2	AC	CCW	CCW TO CONTAINMENT PENETRATIONS CPN-2 & CPN-5 INNER
				COOLING COILS CHECK VALVE
2-CCW-244-72	2	AC	CCW	CCW TO CONTAINMENT PENETRATIONS CPN-3 & CPN-4 INNER
				COOLING COILS CHECK VALVE

FUNCTION:

These valves are the Component Cooling Water supply check valves to the Main Steam Penetrations. These valves have a closed safety function to provide containment isolation and are leak tested in accordance with the Appendix J Program.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be tested during power operation or cold shutdown since cooling must be maintained to the main steam penetrations. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are tested, verifying closure capability at a refueling frequency in accordance with OM Code ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

NUREG-1482, Rev.1, 4.1.6

1 OF 1

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Component ID	Class	Cat.	System	Label
1-CS-292	2	С	CVCS	EMERGENCY BORATION TO CVCS CHARGING PUMPS SUCTION
				HEADER CHECK VALVE
2-CS-292	2	С	CVCS	EMERGENCY BORATION TO CVCS CHARGING PUMPS SUCTION
				HEADER CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a boration flow path to the reactor coolant system which may be required in the event of: (a) a Lo-Lo control rod insertion alarm, (b) failure of a control rod to drop following a reactor trip, (c) an uncontrolled reactor coolant cooldown following a reactor trip or, (d) any unexplained or uncontrolled reactivity increase. This check valve must be capable of passing the minimum required flow rate to perform the safety function (the design capacity of the boric acid transfer pump). These check valves have an active safety function in the closed position to prevent diversion of flow from the centrifugal charging pump suction to the boron makeup system. The emergency boration line is normally isolated by an upstream motor operated valve (QMO-410 or - 420); however, once opened, these motor operated valves fail 'as-is' (in the open position) on a loss of power.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are in the emergency boration path from the boric acid system to the charging pump suction header. Flow through this path is provided at power only when necessary to add negative reactivity. Full-stroke exercising these valves in the open direction at power could result in a plant shutdown.

These check valves are not equipped with position indication. These valves lack design provisions for system testing to verify closure capability at any plant condition.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open capability during cold shutdown in accordance with OM Code ISTC-3522 and 5221.

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with OM Code ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying full-stroke open and closure capability,

once every refueling outage.

REFERENCES:

NUREG-1482, Rev.1, 4.1

1 OF 1

AMERICAN" ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-004

Component ID	Class	Cat.	System	Label
1-CS-299E	2	AC	CVCS	EAST CENTRIFUGAL CHARGING PUMP PP-50E DISCHARGE CHECK VALVE
1-CS-299W	2	AC	CVCS	WEST CENTRIFUGAL CHARGING PUMP PP-50W DISCHARGE CHECK VALVE
2-CS-299E	2	AC	CVCS	EAST CENTRIFUGAL CHARGING PUMP PP-50E DISCHARGE CHECK VALVE
2-CS-299W	2	AC	CVCS	WEST CENTRIFUGAL CHARGING PUMP PP-50W DISCHARGE CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path from the centrifugal charging pump to the reactor coolant system for emergency core cooling. Flow orifices and injection throttle valves prevent pump run-out in the event of a large break loss-of-coolant accident (LBLOCA) and limit the maximum flow rate. These check valves have an active safety function in the closed position to prevent diversion of flow when the associated centrifugal charging pump is idle. The centrifugal charging pump discharge lines join into a common header downstream of the discharge check valves. These valves also have an active safety function in the closed position as pressure isolation valves to protect the low pressure piping in the common charging pump suction header from over-pressurization.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be full-stroke exercised open during power operation because the charging pumps cannot achieve maximum flow rate with the reactor at full pressure or during cold shutdown because the required flow could cause a low temperature overpressure condition.

These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are full-stroke exercised verifying open capability at refueling shutdown frequency when the reactor vessel head is removed in accordance with ISTC-3522 and 5221.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing leak rate testing at each refueling outage.

REFERENCES:

NUREG-1482, 4.1.6

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AMERICAN® ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-005

Component ID	Class	Cat.	System	Label
1-CS-321	2	AC	CVCS	CVCS CHARGING TO REACTOR COOLANT SYSTEM CONTAINMENT
				ISOLATION CHECK VALVE
2-CS-321	2	AC	CVCS	CVCS CHARGING TO REACTOR COOLANT SYSTEM CONTAINMENT
				ISOLATION CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path to the reactor coolant system for boration and makeup to the reactor coolant system to assure plant shutdown capability. The check valves have an active safety function in the closed position for containment isolation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

The valve is located inside containment and is inaccessible during reactor operation. Isolation of this system would result in loss of control of pressurizer level which could result in a reactor trip. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are tested, verifying closure capability at a refueling frequency in accordance with OM Code ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

NUREG-1482, Rev.1, 4.1.6

1 OF 1



Component ID	Class	Cat.	System	Label
1-N-160	2	AC	NG	REACTOR PLANT NITROGEN TO REACTOR COOLANT DRAIN TANK
				TK-1 CHECK VALVE
2-N-160	2	AC	NG	REACTOR PLANT NITROGEN TO REACTOR COOLANT DRAIN TANK
				TK-1 CHECK VALVE

FUNCTION:

These check valves have an active safety function in the closed position to provide containment isolation (CPN-31) during Modes 1, 2, 3, and 4. These valves are open during normal operations. These valves have no safety function in the open position.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These containment isolation check valves are located in the Nitrogen Supply line to the Reactor Coolant Drain Tank. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

AMERICAN* ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-007

Component ID	Class	Cat	System	Label
1-ESW-112	3	С	ESW	EAST ESSENTIAL SERVICE WATER SUPPLY HEADER TO AB
				EMERGENCY DIESEL AB HEAT EXCHANGERS CHECK VALVE
1-ESW-114	3	С	ESW	WEST ESSENTIAL SERVICE WATER SUPPLY HEADER TO CD
				EMERGENCY DIESEL HEAT EXCHANGERS CHECK VALVE
2-ESW-142	3	С	ESW	WEST ESSENTIAL SERVICE WATER TO CD EMERGENCY DIESEL
				HEAT EXCHANGERS CHECK VALVE
2-ESW-144	3	С	ESW	EAST ESSENTIAL SERVICE WATER TO AB EMERGENCY DIESEL
				HEAT EXCHANGERS CHECK VALVE

FUNCTION:

These check valves have an active safety function in the closed position to prevent diversion of flow in the event an alternate supply motor-operated valve is found open or an upstream service water failure.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are not equipped with external position indicators, instrumentation or taps available at the valves to determine positive closure. In order to determine valve closure an entire essential service water (ESW) header and safety train, including both Emergency Diesel Generators, must be removed from service. These valves cannot be tested at cold shutdown frequency because ESW is at its highest load demand (residual heat removal system operating) at this time and cannot be removed from service.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying closure capability at a refueling frequency in accordance with ISTC-5221(c). The valves will be disassembled, manually full-stroke exercised and visually examined.

REFERENCES:



Component ID	Class	Cat.	System	Label
1-R-156	2	AC	ICR	ICE CONDENSER REFRIGERATION GLYCOL SUPPLY HEADER
				CNTMT ISOL VALVES PRESS RELIEF HEADER CHECK VALVE
1-R-157	2	AC	ICR	ICE CONDENSER REFRIGERATION GLYCOL RETURN HEADER
				CNTMT ISOL VALVES PRESS RELIEF HEADER CHECK VALVE
2-R-156	2	AC	ICR	ICE CONDENSER REFRIGERATION GLYCOL SUPPLY HEADER
	_			CNTMT ISOL VALVES PRESS RELIEF HEADER CHECK VALVE
2-R-157	2	AC	ICR	ICE CONDENSER REFRIGERATION GLYCOL RETURN HEADER
	_			CNTMT ISOL VALVES PRESS RELIEF HEADER CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to protect the containment penetrations from overpressure. The glycol supply and return temperatures are -5oF and 1oF respectively. When these lines are isolated the fluid temperature increase may cause a significant pressure increase in the penetration piping. These check valves branch off the main piping between the containment penetration and the inboard isolation valves. This allows the glycol to expand into the main glycol piping. These check valves have an active safety function in the closed position to provide containment isolation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves are installed in parallel lines to the glycol main supply and return lines to relieve glycol thermal expansion. These valves and necessary test connections are located inside containment. The only method available to verify valve closure is leak testing.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open capability quarterly in accordance with ISTC-3522 and 5221.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

NUREG-1482, Rev.1, 4.1.6

Revision 4

1 OF 1

ATT AMERICAN* ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-009

Component ID	Class	Cat.	System	Label
1-CS-442-1	2	AC	RCS	REACTOR COOLANT PUMP SEAL WATER INJECTION TO RCP
				PP-45-1 CONTAINMENT ISOLATION CHECK VALVE
1-CS-442-2	2	AC	RCS	REACTOR COOLANT PUMP SEAL WATER INJECTION TO RCP
				PP-45-2 CONTAINMENT ISOLATION CHECK VALVE
1-CS-442-3	2	AC	RCS	REACTOR COOLANT PUMP SEAL WATER INJECTION TO RCP
				PP-45-3 CONTAINMENT ISOLATION CHECK VALVE
1-CS-442-4	2	AC	RCS	REACTOR COOLANT PUMP SEAL WATER INJECTION TO RCP
				PP-45-4 CONTAINMENT ISOLATION CHECK VALVE
2-CS-442-1	2	AC	RCS	REACTOR COOLANT PUMP SEAL WATER INJECTION TO RCP
				PP-45-1 CONTAINMENT ISOLATION CHECK VALVE
2-CS-442-2	2	AC	RCS	REACTOR COOLANT PUMP SEAL WATER INJECTION TO RCP
				PP-45-2 CONTAINMENT ISOLATION CHECK VALVE
2-CS-442-3	2	AC	RCS	REACTOR COOLANT PUMP SEAL WATER INJECTION TO RCP
				PP-45-3 CONTAINMENT ISOLATION CHECK VALVE
2-CS-442-4	2	AC	RCS	REACTOR COOLANT PUMP SEAL WATER INJECTION TO RCP
				PP-45-4 CONTAINMENT ISOLATION CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a backup reactor coolant system boration flowpath. These check valves have an active safety function in the closed position to provide containment isolation in the event of a loss-of-coolant accident.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These containment isolation check valves are located on the seal water supply line to the reactor coolant pumps. These valves cannot be exercised to the closed position during power operation because cooling flow is required to the reactor coolant pump seals. During cold shutdown, seal water must be maintained to prevent backflow through the seals. Backflow through the seals can result in seal damage from contaminants in the reactor coolant.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open capability quarterly in accordance with ISTC-3522 and 5221.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:



Component ID	Class	s Cat.	System	Label
1-N-159	2	AC	NG	REACTOR PLANT NITROGEN TO PRESSURIZER RELEIF TANK
				OME-5 CONTAINMENT ISOLATION CHECK VALVE
1-PW-275	2	AC	MPW	PRIMARY WATER TO RCP SEAL WATER MAKEUP AND PZR RELIEF
				TANK CONTAINMENT ISOLATION CHECK VALVE
2-N-159	2	AC	NG	REACTOR PLANT NITROGEN TO PRESSURIZER RELEIF TANK
				OME-5 CONTAINMENT ISOLATION CHECK VALVE
2-PW-275	2	AC	MPW	PRIMARY WATER TO RCP SEAL WATER MAKEUP AND PZR RELIEF
				TANK CONTAINMENT ISOLATION CHECK VALVE

FUNCTION:

N-159

These check valves have an active safety function in the closed position to provide containment isolation (CPN-74). These check valves have no safety function in the open position. The valve supplies a nitrogen atmosphere in the pressurizer relief tank. The nitrogen supply to the pressurizer relief tank does not function to mitigate the consequences of an accident and is not required to bring the plant to a safe-shutdown condition or maintain the plant in a safe-shutdown condition.

PW-275

These check valves have an active safety function in the closed position to provide containment isolation(CPN-33). These check valves have an active safety function in the open position to protect the containment penetrations from overpressure. The valve supplies water to the reactor coolant pump seal standpipes and to the pressurizer relief tank. The primary makeup water supply does not function to mitigate the consequences of an accident and is not required to bring the plant to a safe-shutdown condition or maintain the plant in a safe-shutdown condition.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be full-stroke tested to the closed position due to lack of sufficient differential pressure to back seat the valves. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

NUREG-1482, 4.1.6

AMERICAN" ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-011

Component ID	Class	s Cat.	System	Label
1-SI-110N	2	С	SI	NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE HEADER CHECK VALVE
1-SI-110S	2	С	SI	SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE HEADER CHECK VALVE
1-SI-152N	2	AC	SI	NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #1 AND #4 CHECK VALVE
1-SI-152S	2	AC	SI	SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 CHECK VALVE
2-SI-110N	2	С	SI	NORTH SAFETY INJECTION PUMP PP-26N DISCHARGE HEADER CHECK VALVE
2-SI-110S	2	С	SI	SOUTH SAFETY INJECTION PUMP PP-26S DISCHARGE HEADER CHECK VALVE
2-SI-152N	2	AC	SI	NORTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #1 AND #4 CHECK VALVE
2-SI-152S	2	AC	SI	SOUTH SAFETY INJECTION TO REACTOR COOLANT LOOPS #2 AND #3 CHECK VALVE

FUNCTION:

SI-110N/S

These check valves have an active safety function in the open position to provide a flow path for emergency core cooling from the High Head Safety Injection (HHSI) pumps. These check valves have an active safety function in the closed position to prevent diversion of flow. The HHSI system operates with the pump discharge cross tie valves open during the injection phase of safety injection to assure flow to all injection points in the event of a pump failure. The check valve must be capable of closure to prevent diversion of injection flow in the event that its associated pump is idle or due to an upstream active or passive failure.

SI-152N/S

These check valves have an active safety function in the open position to provide a flow path from the associated HHSI pump to the reactor coolant loop cold legs or hot legs. These check valves have an active safety function in the closed position to prevent diversion of HHSI pump flow in the event that either the pressure of the downstream safety injection piping is greater than the shutoff head of the associated safety injection pump or the pump is unavailable due to an active or passive failure. These check valves have an active safety function in the closed position as reactor coolant system (RCS) pressure boundary isolation valves.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

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SI-110N/S

These safety injection pump discharge check valves cannot be exercised during power operation because the safety injection pumps cannot overcome reactor coolant system pressure. These valves cannot be exercised during cold shutdown because the safety injection pumps are required to be inoperable by Technical Specification 3.4.12 to protect against low temperature overpressurization of the reactor.

SI-152N/S

These safety injection check valves cannot be exercised during power operation because the safety injection pumps cannot overcome reactor coolant system pressure. These valves cannot be exercised during cold shutdown because the safety injection pumps are required to be inoperable by Technical Specification 3.4.12 to protect against low temperature overpressurization of the reactor.

These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

SI-110N/S

These valves are full-stroke exercised verifying open and closure capability at a refueling shutdown frequency when the reactor vessel head is removed in accordance with ISTC-3522 and 5221.

SI-152N/S

These valves are full-stroke exercised verifying open capability at a refueling shutdown frequency when the reactor vessel head is removed in accordance with ISTC-3522 and 5221. Open capability will be verified by flow and non-intrusive test equipment.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing leak rate testing at each refueling outage.

REFERENCES:

Donald C. Cook Nuclear Plant IST Program



Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION

ROJ-012

Component ID	Class	Cat.	System	Label
1-SI-142-L1	1	С	SI	BORON INJECTION TO REACTOR COOLANT LOOP #1 COLD LEG CHECK VALVE
1-SI-142-L2	1	С	SI	BORON INJECTION TO REACTOR COOLANT LOOP #2 COLD LEG CHECK VALVE
1-SI-142-L3	1	C	SI	BORON INJECTION TO REACTOR COOLANT LOOP #3 COLD LEG CHECK VALVE
1-SI-142-L4	1	C	SI	BORON INJECTION TO REACTOR COOLANT LOOP #4 COLD LEG CHECK VALVE
2-SI-142-L1	1	С	SI	BORON INJECTION TO REACTOR COOLANT LOOP #1 COLD LEG CHECK VALVE
2-SI-142-L2	1	С	SI	BORON INJECTION TO REACTOR COOLANT LOOP #2 COLD LEG CHECK VALVE
2-SI-142-L3	1.	С	SI	BORON INJECTION TO REACTOR COOLANT LOOP #3 COLD LEG CHECK VALVE
2-SI-142-L4	1	С	SI	BORON INJECTION TO REACTOR COOLANT LOOP #4 COLD LEG CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path for centrifugal charging pump emergency core cooling system (ECCS) injection to the associated reactor coolant loop cold leg. These check valves have an active safety function in the closed position to prevent back flow from the reactor coolant system in the event of a passive upstream component failure.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves are located in the supply lines from the Boron Injection Tank to the reactor coolant cold legs (Loop 1 through 4). The valves cannot be part- or full-stroke exercised during power operation or cold shutdown because this would require injection relatively cold refueling water storage tank water with a higher boric acid concentration into the reactor coolant system, affecting reactivity and reactor coolant system inventory.

These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are full-stroke exercised verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Opening capability will be verified by flow when the reactor vessel head is removed. Closure capability will be verified by performing leak rate testing each refuel outage.

REFERENCES:



Component ID	Class	Cat.	System	Label
1-SI-148	2	С	SI	REFUELING WATER STORAGE TANK TK-33 TO RESIDUAL HEAT
				REMOVAL PUMPS CHECK VALVE
2-SI-148	2	С	SI	REFUELING WATER STORAGE TANK TK-33 TO RESIDUAL HEAT
				REMOVAL PUMPS CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide suction for the low head safety injection pumps from the refueling water storage tank for emergency core cooling.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are located in the refueling water storage tank supply lines to the residual heat removal system. Flow to the core is not possible when the reactor coolant system pressure is above the shut-off pressure of the residual heat removal pumps. In order to full-stroke exercise these valves, the residual heat removal pumps must be operated and the residual heat removal system manually aligned to recirculate flow back to the refueling water storage tank. This configuration makes both residual heat removal trains inoperable since neither train can provide design flow to the core. These valves cannot be full-stroke exercised during cold shutdown because the reactor coolant system cannot accommodate the flow rate from the residual heat removal system. Manual alignment to the refueling water storage tank cannot be performed during cold shutdown because the residual heat removal system is required to be operable for reactor coolant system temperature control.

ALTERNATE TESTING:

These valves are full-stroke exercised in accordance with ISTC-3522 and 5221, verifying open capability during refueling outages. Bi-directional testing (closure verification) is also performed each refuel outage.

REFERENCES:

CR P-99-12574

1 OF 1

AMERICAN[®] ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION

ROJ-014

Component ID	Class	Cat.	System	Label
1-SI-158-L1	1	AC	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #1 HOT LEG CHECK VALVE
1-SI-158-L2	1	AC	SI	WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #2 HOT LEG CHECK VALVE
1-SI-158-L3	1	AC	SI	WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #3 HOT LEG CHECK VALVE
1-SI-158-L4	1	AC	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #4 HOT LEG CHECK VALVE
1-SI-161-L1	1	AC	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #1 COLD LEG CHECK VALVE
1-SI-161-L2	1	AC	SI	WEST RHR & SOUTH SAFETY INJECTION TO REACTOR COOLANT
				LOOP #2 COLD LEG CHECK VALVE
1-SI-161-L3	1	AC	SI	WEST RHR & SOUTH SAFETY INJECTION TO REACTOR COOLANT
				LOOP #3 COLD LEG CHECK VALVE
1-SI-161-L4	1	AC	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #4 COLD LEG CHECK VALVE
2-SI-158-L1	1	AC	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #1 HOT LEG CHECK VALVE
2-SI-158-L2	1	AC	SI	WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #2 HOT LEG CHECK VALVE
2-SI-158-L3	1	AC	SI	WEST RHR AND SOUTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #3 HOT LEG CHECK VALVE
2-SI-158-L4	1	AC	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
	_			COOLANT LOOP #4 HOT LEG CHECK VALVE
2-SI-161-L1	1	AC	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #1 COLD LEG CHECK VALVE
2-SI-161-L2	1	AC	SI	WEST RHR & SOUTH SAFETY INJECTION TO REACTOR COOLANT
				LOOP #2 COLD LEG CHECK VALVE
2-SI-161-L3	1	AC	SI	WEST RHR & SOUTH SAFETY INJECTION TO REACTOR COOLANT
				LOOP #3 COLD LEG CHECK VALVE
2-SI-161-L4	1	AC	SI	EAST RHR AND NORTH SAFETY INJECTION TO REACTOR
				COOLANT LOOP #4 COLD LEG CHECK VALVE

FUNCTION:

SI-158-L1, L2, L3, L4

These check valves have an active safety function in the open position to provide a flow path for safety injection from the high head safety injection (HHSI) pumps and the low head safety injection pumps to the reactor coolant loop hot legs. These check valves have an active safety function in the closed position as reactor coolant system (RCS) pressure boundary isolation valves. Pressure isolation valves are defined as two normally closed valves in series at the RCS pressure boundary that isolate the RCS from an attached low pressure system.

SI-161-L1, L2, L3, L4

These check valves have an active safety function in the open position to provide a flow path for safety injection from the HHSI pumps and the low head safety injection pumps to the reactor coolant loop cold legs. These check valves have an active safety function in the closed position as RCS pressure boundary isolation valves. Pressure isolation valves are defined as two normally closed valves in series at the RCS pressure boundary that isolate the RCS from an attached low pressure system.



TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are located in the supply lines from the Residual Heat Removal and Safety Injection Pumps to the reactor coolant system hot legs (SI-158 series) and cold legs (SI-161 series) loops 1 through 4. These valves cannot be exercised during power operation because the residual heat removal pumps and the safety injection pumps do not develop sufficient head to overcome reactor coolant system pressure. Full-stroke of the valves individually cannot be verified at cold shutdown frequency because flow instrumentation is not available downstream of the flow split.

ALTERNATE TESTING:

These valves are full-stroke exercised in accordance with ISTC-3522 and 5221, verifying open capability at a refueling frequency when the reactor is defueled and sufficient volume exists to accommodate flow.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing leak rate testing at each refueling outage.

REFERENCES:



Component ID	Class	; Cat.	System	Label
1-SI-185	2	AC	SI	REFUELING WATER STORAGE TANK TK-33 TO CVCS CHARGING
				PUMPS SUCTION HEADER CHECK VALVE
2-SI-185	2	AC	SI	REFUELING WATER STORAGE TANK TK-33 TO CVCS CHARGING
				PUMPS SUCTION HEADER CHECK VALVE

FUNCTION:

These swing check valves have an active safety function in the open position to provide suction for the centrifugal charging pumps from the refueling water storage tank for emergency core cooling. These check valves have an active safety function in the closed position to prevent diversion of injection flow when the emergency core cooling systems are operating in the recirculation phase of safety injection following a loss-of-coolant accident.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

Exercising these valves open cannot be accomplished during power operation without introducing a high concentration of boric acid into the reactor coolant system. Exercising the valve at cold shutdown cannot be accomplished because the only full flow path available is into the reactor coolant system, which does not have sufficient volume to accommodate flow without a possible low temperature overpressure condition. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are full-stroke exercised verifying open capability at refueling frequency when the reactor vessel head is removed in accordance with ISTC-3522 and 5221.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing leak rate testing at each refueling outage.

REFERENCES:



ROJ-016

Component ID	Class	s Cat.	System	Label	
1-PA-343	2	AC	CAS	PLANT AIR TO CONTAINMENT AIR SERVICES CONTAINMENT	_
0.04.040	•	40	C AC	CHECK VALVE	
Z-PA-342	2	AC	CAS	CHECK VALVE	

FUNCTION:

These valves have an active safety function in the closed position to provide containment isolation (CPN-29). The service air supply headers are flanged off in Modes 1 and 2, but may be available in Modes 3 and 4. These valves have no safety function in the open position.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves are located in the maintenance air supply line into the containment. The valves cannot be tested during power operation: 1) this line is isolated by removing a spool piece and inserting a blind flange, and 2) the valve and test connections are located inside the containment. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

NUREG-1482, Rev.1, 4.1.6



Component ID	Class	Cat.	System	Label
1-CCW-135	2	AC	CCW	CCW TO REACTOR SUPPORT COOLERS CHECK VALVE
2-CCW-135	2	AC	CCW	CCW TO REACTOR SUPPORT COOLERS CHECK VALVE

FUNCTION:

These valves have an active safety function in the open and closed position. The check valve has an active safety function in the closed position to provide containment isolation. CCW-135 is listed in the UFSAR as a containment isolation valve associated with CPN-82. "Overview of Response to Generic Letter 96-06, Table 5-3 lists SV-122-37 as the overpressure protection device for penetration CPN-82. For 1-SV-122-37 and 2-SV-122-23 to provide this protection for the piping between CCW-135 and CCR-455 the check valve, CCW-135, must open to provide a flow path to Relief Valve, 1-SV-122-37 and 2-SV-122-23. Therefore the valve has an open safety function.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are the component cooling water check valves for the reactor support coolers. These valves cannot be tested in the closed position at power operation without securing cooling water to reactor support coolers which could cause overheating and damage of the concrete around the reactor supports. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are tested, verifying open capability quarterly in accordance with ISTC-3522 and 5221.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

NUREG-1482, Rev.1, 4.1.6

1 OF 1



Component ID	Class	Cat.	System	Label
1-SM-1	2	AC	PAS	CNTMT LOWER COMPT RADIATION DETECTORS ERS-1300 AND
				ERS-1400 SAMPLE RETURN HEADER CHECK VALVE
2-SM-1	2	AC	PAS	CNTMT LOWER COMPT RADIATION DETECTORS ERS-2300 AND
				ERS-2400 SAMPLE RETURN HEADER CHECK VALVE

FUNCTION:

These check valves have an active safety function in the closed position to provide containment isolation (CPN-70). They are the containment isolation valves for the Radiation Monitors ERS-2400.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These containment isolation check valves are located on the containment radiation monitor's sample return and cannot be full stroke exercised during power operation because these monitors are required to be operable in Modes 1, 2, 3, 4, and 6 (during fuel movement). The line is open-ended inside containment. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

Donald C. Cook Nuclear Plant IST Program

Fourth Ten Year Interval

REFUELING OUTAGE JUSTIFICATION

ROJ-019

Component ID	Class	s Cat.	System	Label
1-SI-101	2	AC	SI	REFUELING WATER STORAGE TANK TK-33 SUPPLY TO SAFETY
				INJECTION PUMPS SUCTION CHECK VALVE
2-SI-101	2	AC	SI	REFUELING WATER STORAGE TANK TK-33 SUPPLY TO SAFETY
				INJECTION PUMPS SUCTION CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide suction for the high head safety injection (HHSI) pumps from the refueling water storage tank for emergency core cooling. These check valves have an active safety function in the closed position to prevent diversion of injection flow when the emergency core cooling systems are operating in the recirculation phase of safety injection (SI) following a loss-of-coolant accident.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be full-stroke exercised at power since the SI pumps cannot overcome reactor coolant system pressure and full opening of the valve cannot be achieved with the SI pumps operating on minimum flow paths. The closure capability of the valve cannot be determined by flow or differential pressure measurements since instrumentation is not available and establishment of test conditions would isolate both SI pumps from their suction source and enter the unit into Technical Specification LCO 3.5.2. The valve cannot be exercised during cold shutdown because the SI pumps are required to be inoperable by Technical Specification 3.4.12 to protect against low temperature overpressurization of the reactor. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are full-stroke exercised in accordance with ISTC-3522 and 5221, verifying open capability at a refueling shutdown frequency when the reactor vessel head is removed.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing leak rate testing at each refueling outage.

REFERENCES:

Donald C. Cook Nuclear Plant IST Program

Fourth Ten Year Interval

REFUELING OUTAGE JUSTIFICATION

ROJ-020

Component ID	Class	Cat.	System	Label
1-CS-325	1	С	CVCS	CVCS CHARGING TO PRESSURIZER AUXILIARY SPRAY CHECK VALVE
2-CS-325	1	С	CVCS	CVCS CHARGING TO PRESSURIZER AUXILIARY SPRAY CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position. These valves must open to provide a flow path for auxiliary pressurizer spray as a backup to the Power Operated Relief Valves (PORVs) for depressurization and reflood of the reactor coolant system (RCS). Auxiliary pressurizer sprays are used to bring the plant to cold shutdown when the reactor coolant pumps are not in operation. These check valves have an active safety function in the closed position to prevent back flow from the RCS in the event of a passive upstream component failure.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves can not be full-stroke exercised at power since this action would result in a thermal cycle of the pressurizer spray nozzle and rapid decrease in pressurizer pressure due to the spraying of the steam space with cold water. These valves are not provided with external position indication, nor does the instrumentation exist to test the closed safety function of these check valves quarterly or at cold shutdown.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying full-stroke open and closure capability,

once every refueling outage. If disassembled, the valves will be partially stroked with flow subsequent to reassembly.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:





ROJ-021

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Component ID	Class	Cat.	System	Label
1-QCM-250	2	A	CVCS	REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'A'
1-QCM-350	2	Α	CVCS	REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'B'
2-QCM-250	2	Α	CVCS	REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'A'
2-QCM-350	2	Α	CVCS	CONTAINMENT ISOLATION VALVE REACTOR COOLANT PUMP SEAL WATER RETURN TRAIN 'B' CONTAINMENT ISOLATION VALVE

FUNCTION:

These motor operated gate valves have no safety function in the open position. These valves are normally open to provide a normal system flow path for seal water and excess letdown to the suction of the charging pumps via the Seal Water Return Filter (QC-109). These valves have an active safety function in the closed position for containment isolation. The seal water return line is isolated by a phase A containment isolation signal during emergency and accident conditions.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These motor operated valves provide isolation capability for the reactor coolant pump seal water return to the volume control tank. These valves cannot be exercised during power operation or when the reactor coolant pumps are running as testing would interrupt seal water flow which could cause damage to the pump seals.

ALTERNATE TESTING:

These valves are full-stroke exercised during cold shutdown, if the reactor coolant pumps are stopped, in accordance with ISTC-3521 and 5120. These valves are also full-stroke exercised during refueling outages. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

REFERENCES:

AMERICAN ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-022

Component ID	Class	Cat.	System	Label
1-SI-151E	2	AC	SI	EAST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #1 AND #4 CHECK VALVE
1-SI-151W	2	AC	SI	WEST RHR TO REACTOR COOLANT LOOPS #2 & #3 CHECK VALVE
2-SI-151E	2	AC	SI	EAST RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOPS #1 AND #4 CHECK VALVE
2-SI-151W	2	AC	SI	WEST RHR TO REACTOR COOLANT LOOPS #2 & #3 CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path from the associated low head safety injection pump to the reactor coolant loop cold legs or hot legs. These check valves have an active safety function in the closed position to prevent diversion of high head safety injection pump flow in the event that either the pressure of the downstream safety injection piping is greater than the shutoff head of the associated residual heat removal (RHR) pump or the pump is unavailable due to an active or passive failure. These check valves have an active safety function in the closed position as reactor coolant system (RCS) pressure boundary isolation valves.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves are located in the RHR supply lines to either the hot or cold legs. The valves cannot be exercised during power operation because the residual heat removal pumps do not develop sufficient head to overcome reactor coolant system pressure. These valves are outside the normal RHR shutdown cooling flow path and are not exposed to flow during cold shutdown.

ALTERNATE TESTING:

These valves are full-stroke exercised in accordance with ISTC-3522 and 5221, verifying open capability at a refueling shutdown frequency when the reactor is defueled and sufficient volume exists.

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing leak rate testing at each refueling outage.

REFERENCES:

Donald C. Cook Nuclear Plant IST Program



Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION

ROJ-023

Component ID	Class	Cat.	System	Label
1-CCM-451	2	Α	CCW	RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER TRAIN
				'A' CONTAINMENT ISOLATION VALVE
1-CCM-452	2	Α	CCW	RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER TRAIN
				'B' CONTAINMENT ISOLATION VALVE
1-CCM-453	2	Α	CCW	RCP THERMAL BARRIER COMPONENT COOLING WATER OUTLET
				TRAIN 'A' CONTAINMENT ISOLATION VALVE
1-CCM-454	2	Α	CCW	RC PUMPS THERMAL BARRIER CCW RETURN HEADER TRAIN 'B'
				CONTAINMENT ISOLATION VALVE
1-CCM-458	2	Α	CCW	COMPONENT COOLING WATER TO REACTOR COOLANT PUMPS
				TRAIN 'A' CONTAINMENT ISOLATION VALVE
1-CCM-459	2	Α	CCW	COMPONENT COOLING WATER TO REACTOR COOLANT PUMPS
				TRAIN 'B' CONTAINMENT ISOLATION VALVE
2-CCM-451	2	Α	CCW	RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER TRAIN
				'A' CONTAINMENT ISOLATION VALVE
2-CCM-452	2	Α	CCW	RC PUMPS BEARING OIL COOLERS CCW RETURN HEADER TRAIN
				'B' CONTAINMENT ISOLATION VALVE
2-CCM-453	2	Α	CCW	RCP THERMAL BARRIER COMPONENT COOLING WATER OUTLET
				TRAIN 'A' CONTAINMENT ISOLATION VALVE
2-CCM-454	2	Α	CCW	RC PUMPS THERMAL BARRIER CCW RETURN HEADER TRAIN 'B'
				CONTAINMENT ISOLATION VALVE
2-CCM-458	2	A	CCW	COMPONENT COOLING WATER TO REACTOR COOLANT PUMPS
				TRAIN 'A' CONTAINMENT ISOLATION VALVE
2-CCM-459	2	Α	CCW	COMPONENT COOLING WATER TO REACTOR COOLANT PUMPS
				TRAIN 'B' CONTAINMENT ISOLATION VALVE

FUNCTION:

These normally open motor operated valves have an active safety function in the closed position to provide containment isolation. The valves automatically close upon receipt of a phase B containment isolation signal. These valves have no safety function in the open position. Providing cooling water flow to the reactor coolant pump thermal barriers and motor oil coolers is not a safety-related function.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be tested during power operation without securing cooling water to the reactor coolant pumps which could cause failure of the pumps.

ALTERNATE TESTING:

These valves are full-stroke exercised during cold shutdown, if the reactor coolant pumps are stopped, in accordance with ISTC-3521 and 5120. These valves are also full-stroke exercised during refueling outages. This also satisfies the exercising requirement of once each refuel cycle per Code Case OMN-1.

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REFERENCES:



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ATT: AMERICAN" ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION

ROJ-024

Component ID 1-NS-283	Class	Cat.	System PAS	Label	
	2	AC		CONTAINMENT HYDROGEN MONITORING SYSTEMS SAMPLE RETURN HEADER CHECK VALVE	
1-NS-357	2	AC	PAS	PAS LIQUID AND GAS SAMPLING STATION QC-1007 SAMPLE WASTE TO UNIT 1 CONTAINMENT CHECK VALVE	
2-NS-283	2	AC	PAS	CONTAINMENT HYDROGEN MONITORING SYSTEMS SAMPLE RETURN HEADER CHECK VALVE	
2-NS-357	2	AC	PAS	PAS LIQUID AND GAS SAMPLING STATION QC-1007 SAMPLE WASTE TO UNIT 2 CONTAINMENT CHECK VALVE	

FUNCTION:

NS-283

These containment isolation check valves are located on the return lines of the post accident sampling system to containment. The lines are open ended inside containment. These check valves have an active safety function in the closed position to provide containment isolation. These check valves have an active safety function in the open position to provide a sample return flow path back to the containment during a loss-of-coolant accident (LOCA) for reactor containment hydrogen sampling.

NS-357

These containment isolation check valves are located on the return lines of the post accident sampling system to containment. The lines are open ended inside containment. These check valves have an active safety function in the closed position to provide containment isolation. These check valves have an active safety function in the open position to provide a sample return flow path back to the containment during a LOCA for reactor containment liquid sampling.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These containment isolation check valves are located on return lines of the post accident sampling system inside containment. The lines are open-ended inside containment. These valves are not equipped with external position indication. The only practical means of verifying valve closure is by performing a seat leakage test.

ALTERNATE TESTING:

These valves are tested, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. Closure capability will be verified by performing local leak rate testing in accordance with Appendix J to 10CFR50, at each refueling outage.

REFERENCES:

NUREG-1482, 4.1.4
ATEP AMERICAN® ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-025

Component ID	Class	Cat.	System	Label
1-CS-295	2	С	CVCS	VOLUME CONTROL TANK TO CVCS CHARGING PUMPS SUCTION
				HEADER CHECK VALVE
2-CS-295	2	С	CVCS	VOLUME CONTROL TANK TO CVCS CHARGING PUMPS SUCTION
				HEADER CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path for minimum recirculation flow for the centrifugal charging pumps. The minimum flow recirculation line isolation valves close automatically upon receipt of a safety injection signal but reopen if reactor coolant system (RCS) pressure increases above the High RCS Pressure setpoint. The safety-related suction source for the charging pumps is the refueling water storage tank (RWST). Volume Control Tank (VCT) dischargeilsolation valves QMO-451 and QMO-452 are interlocked to CLOSE on a VCT LOW-LOW level signal or on a safety injection signal after a full OPEN signal is received from IMO-910 or IMO-911. These check valves have an active safety function in the closed position to prevent diversion of flow during the time that the VCT and the RWST both are aligned to the suction of the charging pumps. During the recirculation phase of an accident, these valves have an active safety function in the closed direction to prevent leakage of significant amounts of containment sump water back through the seal water heat exchanger circuit, ultimately preventing a leakage path outside of containment.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These normally open check valves are located in the VCT discharge to charging pump suction header and are downstream of the Reactor Coolant Pump (RCP) seal water return branch connection. Exercising these valves closed during normal plant operation would require securing the charging pumps which would interrupt charging/letdown flow as well as RCP seal injection. Loss of charging could result in loss of pressurizer level control followed by a reactor trip. Testing these valves in the closed position would require termination of seal injection flow. Seal injection flow is maintained continuously to cool and lubricate the RCP seals, and to prevent contaminants in the RCS from coming into contact with (and potentially damaging) the RCP seals and pump bearing.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open capability quarterly in accordance with ISTC-3522 and 5221.

These valves are full-stroke exercised, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

- (1) disassembled, manually full-stroke exercised and visually examined, or
- (2) examined nonintrusively, verifying full-stroke open and closure capability,

once every refueling outage. If disassembled, the valves will be exercised with flow subsequent to reassembly.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

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During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1

AMERICAN"

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-026

Component ID	Class	Cat.	System	Label
1-FW-124	3	С	AFW	EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUCTION CHECK VALVE
1-FW-134	3	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 SUCTION HEADER CHECK VALVE
1-FW-161	3	С	AFW	WEST MOTOR DRIVEN AUX FEED PUMP SUCTION CHECK VALVE
2-FW-124	3	С	AFW	EAST MOTOR DRIVEN AUXILIARY FEEDWATER PUMP PP-3E SUCTION CHECK VALVE
2-FW-134	3	С	AFW	TURBINE DRIVEN AUXILIARY FEED PUMP PP-4 SUCTION HEADER CHECK VALVE
2-FW-161	3	С	AFW	WEST MOTOR DRIVEN AUX FEED PUMP SUCTION CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path from the condensate storage tank to the associated auxiliary feedwater (AFW) pump. These check valves have an active safety function in the closed position to prevent diversion of flow when essential service water is providing the suction source for the associated AFW pump. Essential service water is the emergency water source in the event that the normal suction source from the condensate storage tank is unavailable.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are the suction check valves for the Motor and Turbine Driven Auxiliary Feedwater Pumps. These valves are not provided with external position indication, nor does instrumentation exist to test the closed safety function of these check valves quarterly or at cold shutdown frequency.

ALTERNATE TESTING:

FW-124, 134

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying open and closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every second refueling outage. If disassembled, the valves will be exercised with flow subsequent to reassembly.

FW-161

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or



ROJ-026

(2) examined nonintrusively, verifying open and closure capability,

at refueling frequency. If disassembled, the valve will be exercised with flow subsequent to reassembly.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1



Component ID Class Cat. System Label

FUNCTION:

This ROJ has been replaced by CSJ-038.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

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Component ID Class Cat. System Label

FUNCTION:

This ROJ was not assigned in Revision 3 of the 3rd Ten Year Interval IST Program and will remain unassigned during the 4th Ten Year Interval.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:



Component ID Class Cat. System Label

FUNCTION:

This ROJ was not assigned in Revision 3 of the 3rd Ten Year Interval IST Program and will remain unassigned during the 4th Ten Year Interval.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

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Donald C. Cook Nuclear Plant IST Program



Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION

ROJ-030

Component ID	Class	Cat.	System	Label
1-CCW-224-1	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CHECK VALVE
1-CCW-224-2	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-2 THERMAL BARRIER CHECK VALVE
1-CCW-224-3	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-3 THERMAL BARRIER CHECK VALVE
1-CCW-224-4	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-4 THERMAL BARRIER CHECK VALVE
1-CCW-225-1	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CHECK VALVE
1-CCW-225-2	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-2 THERMAL BARRIER CHECK VALVE
1-CCW-225-3	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-3 THERMAL BARRIER CHECK VALVE
1-CCW-225-4	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-4 THERMAL BARRIER CHECK VALVE
2-CCW-224-1	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CHECK VALVE
2-CCW-224-2	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-2 THERMAL BARRIER CHECK VALVE
2-CCW-224-3	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-3 THERMAL BARRIER CHECK VALVE
2-CCW-224-4	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-4 THERMAL BARRIER CHECK VALVE
2-CCW-225-1	3	С		CCW TO REACTOR COOLANT PUMP PP-45-1 THERMAL BARRIER CHECK VALVE
2-CCW-225-2	3	C	CCW	CCW TO REACTOR COOLANT PUMP PP-45-2 THERMAL BARRIER CHECK VALVE
2-CCW-225-3	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-3 THERMAL BARRIER CHECK VALVE
2-CCW-225-4	3	С	CCW	CCW TO REACTOR COOLANT PUMP PP-45-4 THERMAL BARRIER CHECK VALVE

FUNCTION:

CCW-224-1, 2, 3, 4

These check valves are the outboard check valve (one valve from each group in series for each loop) located on the component cooling water (CCW) cooling supply to the reactor coolant pump (RCP) thermal barriers. These check valves have an active safety function in the closed position to isolate reactor coolant system (RCS) in-leakage into the low pressure CCW cooling supply header in the event of RCP thermal barrier leakage. These check valves do not have a safety function in the open position.

CCW-225-1, 2, 3, 4

These check valves are the inboard check valve (one valve from each group in series for each loop) located on the CCW cooling supply to the RCP thermal barriers. These check valves have an active safety function in the closed position to isolate RCS in-leakage into the low pressure CCW cooling supply header in the event of RCP thermal barrier leakage. These check valves do not have a safety function in the open position.

TEST REQUIREMENT:

Revision 4

AMERICAN" ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-030

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be tested during reactor coolant pump operation without securing component cooling water flow to the thermal barrier heat exchanger, which could cause reactor coolant pump seal failure. Valve disc travel to the seat on cessation or reversal of flow can not be monitored using installed plant instrumentation.

ALTERNATE TESTING:

CCW-224-1, 2, 3, 4

These valves are full-stroke exercised, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every fourth refueling outage. If disassembled, the valves will be exercised with normal system flow subsequent to reassembly.

CCW-225-1, 2, 3, 4

These valves are full-stroke exercised, verifying closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every fourth refueling outage. If disassembled, the valves will be exercised with normal system flow subsequent to reassembly.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1

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Component ID	Class	Cat.	System	Label
1-CTS-138E	2	С	CTS	REFUELING WATER STORAGE TANK TO EAST CONTAINMENT
				SPRAY PUMP PP-9E SUCTION CHECK VALVE
1-CTS-138W	2	С	CTS	REFUELING WATER STORAGE TANK TO WEST CONTAINMENT
				SPRAY PUMP PP-9W SUCTION CHECK VALVE
2-CTS-138E	2	С	CTS	REFUELING WATER STORAGE TANK TO EAST CONTAINMENT
				SPRAY PUMP PP-9E SUCTION CHECK VALVE
2-CTS-138W	2	С	CTS	REFUELING WATER STORAGE TANK TO WEST CONTAINMENT
				SPRAY PUMP PP-9W SUCTION CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a suction path from the Refueling Water Storage Tank (RWST) to the Containment Spray Pumps. These check valves have an active safety function in the closed position to prevent diversion of flow to the RWST from the recirculation sump or reactor coolant system during residual heat removal system operation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be full-stroke exercised during power operation, cold shutdown or refueling without spraying the containment. The six inch Spray Pump full flow recirc line returns to the pump suction down stream of CTS-138E/W. The three inch Spray Pump test line returns to the pump suction up stream of CTS-138E/W, however, this flow path is not capable of passing full flow.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying full-stroke open and closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every second refueling outage. If disassembled, the valves will be partially exercised with flow subsequent to reassembly.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1

Revision 4



2 OF 2

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ROJ-032

Component ID	Class	Cat.	System	Label
1-CTS-127E	2	AC	CTS	EAST CONTAINMENT SPRAY TO LOWER COMPARTMENT RING
	-			HEADER CONTAINMENT ISOLATION CHECK VALVE
1-CTS-127W	2	AC	CTS	WEST CONTAINMENT SPRAY TO LOWER COMPARTMENT RING
	-			HEADER CONTAINMENT ISOLATION CHECK VALVE
1-CTS-131E	2	AC	CTS	EAST CONTAINMENT SPRAY TO UPPER COMPARTMENT RING
				HEADER CONTAINMENT ISOLATION CHECK VALVE
1-CTS-131W	2	AC	CTS -	WEST CONTAINMENT SPRAY TO UPPER COMPARTMENT RING
				HEADER CONTAINMENT ISOLATION CHECK VALVE
1-RH-141	2	AC	CTS	EAST RHR TO UPPER CONTAINMENT SPRAY RING HEADER
				CONTAINMENT ISOLATION CHECK VALVE
1-RH-142	2	AC	CTS	WEST RHR TO UPPER CONTAINMENT SPRAY RING HEADER
				CONTAINMENT ISOLATION CHECK VALVE
2-CTS-127E	2	AC	CTS	EAST CONTAINMENT SPRAY TO LOWER COMPARTMENT RING
				HEADER CONTAINMENT ISOLATION CHECK VALVE
2-CTS-127W	2	AC	CTS	WEST CONTAINMENT SPRAY TO LOWER COMPARTMENT RING
				HEADER CONTAINMENT ISOLATION CHECK VALVE
2-CTS-131E	2	AC	CTS	EAST CONTAINMENT SPRAY TO UPPER COMPARTMENT RING
				HEADER CONTAINMENT ISOLATION CHECK VALVE
2-CTS-131W	2	AC	CTS	WEST CONTAINMENT SPRAY TO UPPER COMPARTMENT RING
				HEADER CONTAINMENT ISOLATION CHECK VALVE
2-RH-141	2	AC	CTS	EAST RHR TO UPPER CONTAINMENT SPRAY RING HEADER
				CONTAINMENT ISOLATION CHECK VALVE
2-RH-142	2	AC	CTS '	WEST RHR TO UPPER CONTAINMENT SPRAY RING HEADER
	-			CONTAINMENT ISOLATION CHECK VALVE

FUNCTION:

CTS-127E, W

These check valves have an active safety function in the open position to allow the passage of containment spray flow to the lower volume containment spray rings. These check valves have an active safety function in the closed position to provide containment isolation.

CTS-131E, W

These check valves have an active safety function in the open position to allow the passage of containment spray flow to the upper volume containment spray rings. These check valves have an active safety function in the closed position to provide containment isolation.

RH-141, 142

These check valves have an active safety function in the open position to allow the passage of containment spray flow to the upper volume containment spray rings from the residual heat removal heat exchangers. These check valves have an active safety function in the closed position to provide containment isolation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

Revision 4



ROJ-032

These valves are exposed to containment atmosphere on the downstream side and are isolated from fluid pressure on the upstream side by closed motor operated valves. These valves cannot be full stroke exercised during power operation, cold shutdown or refueling without spraying containment.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will be disassembled, manually full-stroke exercised and visually examined on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every second refueling outage.

REFERENCES:

NUREG-1482, Rev.1, 4.1

Donald C. Cook Nuclear Plant IST Program



Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION

ROJ-033

Component ID	Class	Cat.	System	Label
1-FW-118-1	2	С	FW	FEEDWATER TO STEAM GENERATOR #1 CONTAINMENT
1-FW-118-2	2	С	FW	FEEDWATER TO STEAM GENERATOR #2 CONTAINMENT
1-FW-118-3	2	С	FW	FEEDWATER TO STEAM GENERATOR #3 CONTAINMENT
1-FW-118-4	2	С	FW	ISOLATION CHECK VALVE FEEDWATER TO STEAM GENERATOR #4 CONTAINMENT
2-FW-118-1	2	с	FW	ISOLATION CHECK VALVE FEEDWATER TO STEAM GENERATOR #1 CONTAINMENT
2-FW-118-2	2	С	FW	ISOLATION CHECK VALVE FEEDWATER TO STEAM GENERATOR #2 CONTAINMENT
0 514/ 440 0	2		514	ISOLATION CHECK VALVE
2-FVV-118-3	2.	C	FVV	ISOLATION CHECK VALVE
2-FW-118-4	2	С	FW	FEEDWATER TO STEAM GENERATOR #4 CONTAINMENT ISOLATION CHECK VALVE

FUNCTION:

These check valves have an active safety function in the closed position to isolate the feedwater header on a loss of main feedwater flow, and to prevent diversion of auxiliary feedwater flow. The valves have no safety function in the open position.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be exercised during power operation. This would require securing feedwater flow to the steam generators. Back flow cannot be quantified at cold shutdown due to system configuration. The only practical methods to verify closure are by disassembly and inspection or non-intrusive examination.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying closure capability, at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined non-intrusively, verifying closure capability,

on a sampling basis, per ISTC-5221(c) at a refueling frequency such that all valves will be examined no less frequently than once every fourth refueling outage.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked;

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ROJ-033

however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1



Component ID	Class	Cat.	System	Label
1-SI-166-1	1	AC	SI	ACCUMULATOR TANK OME-6-1 DISCHARGE CHECK VALVE
1-SI-166-2	1	AC	SI	ACCUMULATOR TANK OME-6-2 DISCHARGE CHECK VALVE
1-SI-166-3	1	AC	SI	ACCUMULATOR TANK OME-6-3 DISCHARGE CHECK VALVE
1-SI-166-4	1	AC	SI	ACCUMULATOR TANK OME-6-4 DISCHARGE CHECK VALVE
2-SI-166-1	1	AC	SI	ACCUMULATOR TANK OME-6-1 DISCHARGE CHECK VALVE
2-SI-166-2	1	AC	SI	ACCUMULATOR TANK OME-6-2 DISCHARGE CHECK VALVE
2-SI-166-3	1	AC	SI	ACCUMULATOR TANK OME-6-3 DISCHARGE CHECK VALVE
2-SI-166-4	1	AC	SI	ACCUMULATOR TANK OME-6-4 DISCHARGE CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path from the emergency core cooling system accumulators to the associated reactor coolant loop cold legs. These check valves have an active safety function in the closed position as reactor coolant system (RCS) pressure boundary isolation valves.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves cannot be exercised at power operation because the accumulators do not have sufficient head to overcome reactor coolant system pressure. The valves cannot be exercised during cold shutdown because this would result in a possible low temperature overpressurization of the reactor coolant system.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying full-stroke open and closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every fourth refueling outage.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1





Component ID	Class	Cat.	System	Label
1-SI-170-L1	1	AC	SI	ACCUMULATOR TANK OME-6-1 OUTLET & ECCS TO REACTOR
				COOLANT LOOP #1 COLD LEG CHECK VALVE
1-SI-170-L2	1	AC	SI	ACCUMULATOR TANK OME-6-2 OUTLET & ECCS TO REACTOR
				COOLANT LOOP #2 COLD LEG CHECK VALVE
1-SI-170-L3	1	AC	SI	ACCUMULATOR TANK OME-6-3 OUTLET & ECCS TO REACTOR
				COOLANT LOOP #3 COLD LEG CHECK VALVE
1-SI-170-L4	1	AC	SI	ACCUMULATOR TANK OME-6-4 OUTLET & ECCS TO REACTOR
				COOLANT LOOP #4 COLD LEG CHECK VALVE
2-SI-170-L1	1	AC	SI	ACCUMULATOR TANK OME-6-1 OUTLET & ECCS TO REACTOR
				COOLANT LOOP #1 COLD LEG CHECK VALVE
2-SI-170-L2	1	AC	SI	ACCUMULATOR TANK OME-6-2 OUTLET & ECCS TO REACTOR
				COOLANT LOOP #2 COLD LEG CHECK VALVE
2-SI-170-L3	1	AC	SI	ACCUMULATOR TANK OME-6-3 OUTLET & ECCS TO REACTOR
				COOLANT LOOP #3 COLD LEG CHECK VALVE
2-SI-170-L4	1	AC	SI	ACCUMULATOR TANK OME-6-4 OUTLET & ECCS TO REACTOR
				COOLANT LOOP #4 COLD LEG CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path for safety injection from the emergency core cooling system accumulators, high head safety injection pumps, and the low head safety injection (Residual Heat Removal) pumps to the reactor coolant loop cold legs. These check valves have an active safety function in the closed position as reactor coolant system (RCS) pressure boundary isolation valves.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves are located in the reactor coolant system cold leg, loops 1 through 4, injection lines from the accumulators, residual heat removal and safety injection systems. They cannot be exercised during power operation because the pumps in these systems do not develop sufficient head to overcome reactor coolant system pressure. These valves are sized such that full-stroke testing cannot be attained without discharging the accumulators and operating safety injection and residual heat removal pumps simultaneously.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

- (1) disassembled, manually full-stroke exercised and visually examined, or
- (2) examined nonintrusively, verifying full-stroke open and closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every fourth refueling outage.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the



valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1



Component ID	Class	s Cat.	System	Label
1-SI-189	2	AC	SI	ECCS SAFETY VALVES DISCHARGE HEADER TO PRESSURIZER
				RELIEF TANK CONTAINMENT ISOLATION CHECK VALVE
2-SI-189	2	AC	SI	ECCS SAFETY VALVES DISCHARGE HEADER TO PRESSURIZER
				RELIEF TANK CONTAINMENT ISOLATION CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path to the pressurizer relief tank from the emergency core cooling system safety valves which provide overpressure protection. These check valves have an active safety function in the closed position for containment isolation.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

Isolating these values for testing would result in dead heading all of the safety values located outside containment that discharge to the Pressurizer Relief Tank. This would result in loss of overpressurization protection and could put the plant in an unsafe condition.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying full-stroke open and closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every fourth refueling outage.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1

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ALEP AMERICAN" ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION

ROJ-037

Component ID	Class	Cat.	System	Label
1-CS-328-L1	1	C	CVCS	CVCS ALTERNATE CHARGING TO REACTOR COOLANT LOOP #1 COLD LEG CHECK VALVE
1-CS-328-L4	1	С	CVCS	CVCS NORMAL CHARGING TO REACTOR COOLANT LOOP #4 COLD LEG CHECK VALVE
1-CS-329-L1	1	С	CVCS	CVCS ALTERNATE CHARGING TO REACTOR COOLANT LOOP #1 COLD LEG CHECK VALVE
1-CS-329-L4	1	C	CVCS	CVCS NORMAL CHARGING TO REACTOR COOLANT LOOP #4 COLD LEG CHECK VALVE
2-CS-328-L1	1	C	CVCS	CVCS ALTERNATE CHARGING TO REACTOR COOLANT LOOP #1 COLD LEG CHECK VALVE
2-CS-328-L4	1	С	CVCS	CVCS NORMAL CHARGING TO REACTOR COOLANT LOOP #4 COLD LEG CHECK VALVE
2-CS-329-L1	1	С	CVCS	CVCS ALTERNATE CHARGING TO REACTOR COOLANT LOOP #1 COLD LEG CHECK VALVE
2-CS-329-L4	1	С	CVCS	CVCS NORMAL CHARGING TO REACTOR COOLANT LOOP #4 COLD LEG CHECK VALVE

FUNCTION:

These check valves have an active safety function in the open position to provide a flow path to the reactor coolant system for boration and makeup to the reactor coolant system to assure plant shutdown capability. These check valves have an active safety function in the closed position to prevent back flow from the reactor coolant system in the event of a passive upstream component failure.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are full stroke open tested quarterly. These 3-inch bolted bonnet swing check valves have no external position indication or means of verification of the closed position, and are located inside the crane wall in reactor containment. There is no upstream instrumentation that can be used to show that the valves return to the fully closed position after exercising.

ALTERNATE TESTING:

These valves are full-stroke exercised, verifying open and closure capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

- (1) disassembled, manually full-stroke exercised and visually examined, or
- (2) examined nonintrusively, verifying full-stroke open and closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every fourth refueling outage.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.



During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1

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Component ID Class Cat. System Label

FUNCTION:

This ROJ has been deleted and the number will remain unassigned during the 4th Ten Year Interval.

TEST REQUIREMENT:

BASIS:

ALTERNATE TESTING:

REFERENCES:

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ALER AMERICAN[®] ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-039

Component ID	Class	Cat.	System	Label
1-CMO-415	3	В	CCW	COMPONENT COOLING WATER TO MISCELLANEOUS SERVICE TRAIN 'A' SHUTOFF VALVE
1-CMO-416	3	В	CCW	COMPONENT COOLING WATER TO MISCELLANEOUS SERVICE TRAIN 'B' SHUTOFF VALVE
2-CMO-415	3	В	CCW	COMPONENT COOLING WATER TO MISCELLANEOUS SERVICE TRAIN 'A' SHUTOFF VALVE
2-CMO-416	3	В	CCW	COMPONENT COOLING WATER TO MISCELLANEOUS SERVICE TRAIN 'B' SHUTOFF VALVE

FUNCTION:

These valves are the Component Cooling Water to miscellaneous header isolation valves. They are normally open and are closed to isolate one safeguard header from the miscellaneous service train.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These valves are exercised quarterly using the motor operator. In the event of a loss of power these valves would have to be repositioned manually. Requiring dis-engaging the motor operator and manually exercising the valves quarterly provides no added benefit and requires significant extra testing and manpower.

ALTERNATE TESTING:

These valve's manual stroke capability will be verified per the requiremnets of the Generic Letter GL 89-10 program or Code Case OMN-1.

REFERENCES:

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AMERICAN" ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program

Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION

ROJ-040

Component ID	Class	Cat.	System	Label
1-NS-620	2	С	NS	SAFETY INJECTION ACCUMULATOR SAMPLING LINE 1-IRV-3 BYPASS CHECK VALVE
1-NS-621	2	С	NS	REACTOR COOLANT LOOP #3 HOT LEG SAMPLE SHUTOFF VALVE 1-NRV-103 BYPASS CHECK VALVE
1-NS-622	2	С	NS	PRESSURIZER LIQUID SPACE SAMPLE SHUTOFF VALVE 1-NRV-102 BYPASS CHECK VALVE
2-NS-620	2	С	NS	SAFETY INJECTION ACCUMULATOR SAMPLING LINE BYPASS CHECK VALVE
2-NS-621	2	С	NS	REACTOR COOLANT LOOP #3 HOT LEG SAMPLE SHUTOFF VALVE 2-NRV-103 BYPASS CHECK VALVE
2-NS-622	2	С	NS	PRESSURIZER LIQUID SPACE SAMPLE SHUTOFF VALVE 2-NRV-102 BYPASS CHECK VALVE

FUNCTION:

NS-620

These check valves provide overpressurization protection to sample lines that are drawn from the Safety Injection Accumulators through IRV-3. The function of IRV-3 is to isolate flow to the sample sinks. The valve is located inside containment but does not function as a containment isolation valve. The containment isolation valve is outside containment. IRV-3 fails closed. The concern is that following a loss-of-coolant accident (LOCA), the containment isolation valves outside containment would be closed and valve IRV-3 could close forming a watertight barrier. Increased temperature inside containment could cause the watertight volume to expand overpressurizing the piping or the containment isolation valves challenging the integrity of the containment penetration isolation function. Check valve NS-620 must open to vent off pressure from the watertight area into piping upstream of valve IRV-3 which is at a lower pressure and therefore perform the function of overpressurization protection for the safety related penetration.

NS-621

These check valves provide overpressurization protection to sample lines that are drawn from the reactor coolant system (RCS) Hot Legs through NRV-103. The function of NRV-103 is to isolate flow to the sample sinks. The valve is located inside containment but does not function as a containment isolation valve. The containment isolation valve is outside containment. NRV-103 fails closed. The concern is that following a LOCA, the containment isolation valves outside containment would be closed and valve NRV-103 could close forming a watertight barrier. Increased temperature inside containment could cause the watertight volume to expand overpressurizing the piping or the containment isolation valves challenging the integrity of the containment penetration isolation function. Check valve NS-621 must open to vent off pressure from the watertight area into piping upstream of valve NRV-103 which is at a lower pressure and therefore perform the function of overpressurization protection for the safety related penetration.

NS-622

These check valves provide overpressurization protection to sample lines that are drawn from the Pressurizer Liquid Space through NRV-102. The function of NRV-102 is to isolate flow to the sample sinks. The valve is located inside containment but does not function as a containment isolation valve. The containment isolation valve is outside containment. NRV-102 fails closed. The concern is that following a LOCA, the containment isolation valves outside containment would be closed and valve NRV-102 could close forming a watertight barrier. Increased temperature inside containment could cause the watertight volume to expand overpressurizing the piping or the containment isolation valves challenging the integrity of the containment penetration isolation function. Check valve NS-620 must open to vent off pressure from the watertight area into piping upstream of



ROJ-040

valve NRV-102 which is at a lower pressure and therefore perform the function of overpressurization protection for the safety related penetration.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

1/2-NS-620, 621, 622

These check valves were installed to satisfy thermal overpressure concerns of GL 96-06. The valves are located inside containment and are not provided with a means to determine disc position in either the open or closed positions, nor is instrumentation provided to indicate flow through the valves. The only practical method to verify open and closure capability is by disassembly or non-intrusive examination during refueling outages.

ALTERNATE TESTING:

NS-620

These valves are full-stroke exercised, verifying open capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying open and closure capability,

each refueling outage.

NS-621, 622

These valves are full-stroke exercised, verifying open capability at a refueling frequency in accordance with ISTC-3522 and 5221. The valves will either be:

(1) disassembled, manually full-stroke exercised and visually examined, or

(2) examined nonintrusively, verifying open and closure capability,

on a sampling basis, per ISTC-5221(c) at refueling frequency such that all valves will be examined no less frequently than once every second refueling outage.

When using non-intrusive testing techniques in a sampling plan, similar valves in the same service are grouped for testing purposes, not to exceed four valves in a single group. During the initial test of each valve, non-intrusive techniques will verify that the system pressures and flow conditions specified in the test procedures cause the valves to fully stroke.

During subsequent testing, if the system conditions are repeatable, each valve would typically be fully stroked; however, the non-intrusive verification need be performed for only one valve of the group on a rotating schedule each time testing is performed.

REFERENCES:

NUREG-1482, Rev.1, 4.1



3 OF 3

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AMERICAN[®] ELECTRIC

Donald C. Cook Nuclear Plant IST Program Fourth Ten Year Interval REFUELING OUTAGE JUSTIFICATION ROJ-041

Component ID	Class	Cat.	System	Label
1-RH-133	1	AC	RHR	RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOP #2 COLD LEG CHECK VALVE
1-RH-134	1	AC	RHR	RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOP #3 COLD LEG CHECK VALVE
2-RH-133	1	AC	RHR	RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOP #2 COLD LEG CHECK VALVE
2-RH-134	1	AC	RHR	RESIDUAL HEAT REMOVAL TO REACTOR COOLANT LOOP #3 COLD LEG CHECK VALVE

FUNCTION:

These swing check valves have an active safety function in the closed position for pressure isolation. A pressure isolation valve is defined as one of two normally closed valves, arranged in series, that isolate the Reactor Coolant System (RCS) from an attached low pressure system. The Residual heat Removal (RHR) system design pressure is less than the RCS. These check valves are isolated by upstream isolation valve ICM-111 which is closed and deenergized in Modes 1, 2 and 3. ICM -111 is energized and opened for placing RHR in service for plant cooldown after shutdown.

These swing check valves have a safety significant function in the open position to provide a flow path to the RCS for reactor cooldown and decay heat removal in Operational Modes 4, 5, and 6. Each train of RHR is sized to provide sufficient flow through the RHR heat exchangers to remove the decay heat generated by the reactor core existing after shutdown from an extended run at or near full power. Each RHR supply check valve must be capable of passing at least half of the required flow rate in order to perform it's intended function in the open direction. However, it should be noted that although RH-133 and RH-134 are required to bring the plant to cold shutdown conditions using the RHR system, they are not required to meet the licensing basis condition of hot shutdown. Bi-directional testing in the open direction is satisfied when RHR is operating in the decay heat removal mode.

TEST REQUIREMENT:

OM Code ISTC-3510 requires Active Category A, Category B, and Category C check valves to be exercised nominally every 3 months, except as provided by ISTC-3520, 3540, 3550, 3560, 5221, and 5222.

BASIS:

These check valves cannot be exercised in the reverse direction during normal operation or cold shutdown. They are located inside containment and are not provided with position indication. Entry into containment during normal power operation is not practical due to ALARA concerns and personnel safety. Reverse exercising during cold shutdown is not practical since it would require an interruption of RHR flow which would be inservice for decay heat removal. The only practical means to verify closure capability is by using an outside pressure source to perform a seat leakage test when RHR is not required to be inservice.

ALTERNATE TESTING:

Closure capability will be demonstrated by the performance of a seat leakage test during refueling outages. As PIVs the valves are required to leak tested per TS 3.4.14.

REFERENCES:

TS 3.4.14



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Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: AFW - Auxiliary Feedwater

			Inse	ervice	Test P	arame	eters				
Component	PiD(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq	Code Dev.	Comn	ients
1-PP-3E EAST MOTOR DRIVEN / PUMP	1-5106A (G9) AUXILIARY FEI	3 EDWATER	Yes Yes	Yes Yes	Yes Yes	Yes Yes	No No	Q 2A		Group A Test Comprehensive Test	
1-PP-3W WEST MOTOR DRIVEN PUMP	1-5106A (D9) AUXILIARY FE	3 EDWATER	Yes Yes	Yes Yes	Yes Yes	Yes Yes	No No	Q 2A		Group A Test Comprehensive Test	
1-PP-4 TURBINE DRIVEN AUXI	1-5106A (K9) LIARY FEED P	3 UMP	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Q 2A	REL - PP4	Group B Test Comprehensive Test	
2-PP-3E EAST MOTOR DRIVEN A PUMP	2-5106A (G9) AUXILIARY FE	3 EDWATER	Yes Yes	Yes Yes	Yes Yes	Yes Yes	No No	Q 2A		Group A Test Comprehensive Test	
2-PP-3W WEST MOTOR DRIVEN PUMP	2-5106A (K9) AUXILIARY FE	3 EDWATER	Yes Yes	Yes Yes	Yes Yes	Yes Yes	No No	Q 2A		Group A Test Comprehensive Test	· · · · · · · · · · · · ·
2-PP-4 TURBINE DRIVEN AUXI	2-5106A (D9) LIARY FEED P	3 UMP	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Q 2A	REL - PP4	Group B Test Comprehensive Test	

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Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: CCW - Component Cooling Water

		Code Class	Inse	rvice	Test P	arame	eters		Code Dev.	
Component	PID(Coord)		Disc. Press	DP	Flow	VIB	Sp ee d	Freq		Comments
12-PP-10	1-5135 (F4)	3	Yes	Yes	Yes	Yes	No	Q	· .	If replacing 1/2-PP-10E/W (Group A Test)
SPARE COMPONENT	F COOLING WATE	R PUMP	Yes	Yes	Yes	Yes	No	2A		If replacing 1/2-PP-10E/W (Comprehensive Test)
1-PP-10E	1-5135 (F6)	3	Yes	Yes	Yes	Yes	No	Q		Group A Test
EAST COMPONENT (COOLING WATER	PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
1-PP-10W	1-5135 (F7)	3	Yes	Yes	Yes	Yes	No	Q		Group A Test
WEST COMPONENT	COOLING WATER	R PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
2-PP-10E	2-5135 (F5)	3	Yes	Yes	Yes	Yes	No	Q		Group A Test
EAST COMPONENT (COOLING WATER	PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
2-PP-10W	2-5135 (F7)	3	Yes	Yes	Yes	Yes	No	Q		Group A Test
WEST COMPONENT	COOLING WATER	R PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test

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Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: CTS - Containment Spray

			Inse	ervice	Test P	aram	eters		Code Dev.	· ·	
Component	PID(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq		Comments	
1-PP-9E EAST CONTAINMENT	1-5144 (H9) SPRAY PUMP	2	Yes Yes	Yes Yes	Yes Yes	No Yes	No No	Q 2A		Group B Test Comprehensive Test	
1-PP-9W WEST CONTAINMENT	1-5144 (K9) SPRAY PUMP	2	Yes Yes	Yes Yes	Yes Yes	No Yes	No No	Q 2A		Group B Test Comprehensive Test	
2-PP-9E EAST CONTAINMENT	2-5144 (H9) SPRAY PUMP	2	Yes Yes	Yes Yes	Yes Yes	No Yes	No No	Q 2A		Group B Test Comprehensive Test	
2-PP-9W WEST CONTAINMENT	2-5144 (K9) SPRAY PUMP	2	Yes Yes	Yes Yes	Yes Yes	No Yes	No No	Q 2A		Group B Test Comprehensive Test	

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Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: CVCS - Chemical and Volume Control

			Inse	ervice	eters						
Component	PID(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq	Code Dev.	Comments	
1-PP-46-1	12-5131 (E4)	3	Yes	Yes	Yes	Yes	No	Q	REL - PP1	Group A Test	
BORIC ACID STORAG	E TANKS TŘAŃSI	FER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test	
1-PP-46-2	12-5131 (E2)	3	Yes	Yes	Yes	Yes	No	Q	REL - PP1	Group A Test	
BORIC ACID STORAG	E TANKS TRAŃS	FER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test	
1-PP-50E	1-5129 (J8)	2	Yes	Yes	Yes	Yes	No	Q	······	Group A Test	
EAST CENTRIFUGAL	CHARGING PUM	P	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test	
1-PP-50W	1-5129 (G8)	2	Yes	Yes	Yes	Yes	No	Q	<u></u>	Group A Test	
WEST CENTRIFUGAL	CHARGING PUM	P	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test	
2-PP-46-3	12-5131 (E6)	3	Yes	Yes	Yes	Yes	No	Q	REL - PP1	Group A Test	
BORIC ACID STORAG #3	E TANKS TRAŃS	FER PUMP	'Yes	Yes	Yes	Yes	No	2A		Comprehensive Test	
2-PP-46-4	12-5131 (E9)	3	Yes	Yes	Yes	Yes	No	Q	REL - PP1	Group A Test	
BORIC ACID STORAG #4	E TANKS TŘAŃS	FER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test	
2-PP-50E	2-5129 (J8)	2	Yes	Yes	Yes	Yes	No	Q		Group A Test	
EAST CENTRIFUGAL	CHARGINĠ PÚMI	Р	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test	
2-PP-50W	2-5129 (G8)	2	Yes	Yes	Yes	Yes	No	Q		Group A Test	
WEST CENTRIFUGAL	CHARGING PUM	IP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test	

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Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: DSLFO - Diesel Fuel Oil

			Inse	ervice	Test P	arame	eters			
Component	PID(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq	Code Dev.	Comments
1-QT-106-AB1 AB EMERGENCY DIESE PUMP #1	2-5151A (H3) L FUEL OIL TR	0 ANSFER	Yes	No	Yes	Yes	No	Q		Group A Test (in lieu of Group B and Comprehensive Tests)
1-QT-106-AB2 AB EMERGENCY DIESE PUMP #2	2-5151A (J3) L FUEL OIL TR	0 ANSFER	Yes	No	Yes	Yes	No	Q		Group A Test (in lieu of Group B and Comprehensive Tests)
1-QT-106-CD1 CD EMERGENCY DIESE PUMP #1	1-5151C (J3) L FUEL OIL TR	0 ANSFER	Yes	No	Yes	Yes	No	Q		Group A Test (in lieu of Group B and Comprehensive Tests)
1-QT-106-CD2 CD EMERGENCY DIESE PUMP #2	1-5151C (K3) L FUEL OIL TR	0 ANSFER	Yes	No	Yes	Yes	No	Q		Group A Test (in lieu of Group B and Comprehensive Tests)
2-QT-106-AB1 AB EMERGENCY DIESE PUMP #1	2-5151A (K3) L FUEL OIL TR	0 ANSFER	Yes	No	Yes	Yes	No	Q		Group A Test (in lieu of Group B and Comprehensive Tests)
2-QT-106-AB2 AB EMERGENCY DIESE PUMP #2	2-5151A (L3) L FUEL OIL TR	0 ANSFER	Yes	No	Yes	Yes	No	Q		Group A Test (in lieu of Group B and Comprehensive Tests)
2-QT-106-CD1 CD EMERGENCY DIESE PUMP #1	1-5151C (L3) L FUEL OIL TR	0 ANSFER	Yes	No	Yes	Yes	No	Q		Group A Test (in lieu of Group B and Comprehensive Tests)
2-QT-106-CD2 CD EMERGENCY DIESE PUMP #2	L FUEL OIL TR	0 ANSFER	Yes	No	Yes	Yes	No	Q		Group A Test (in lieu of Group B and Comprehensive Tests)

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Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: DSLJW - Diesel Jacket Water

			Inse	ervice	Test P	arame	eters			
Component	PID(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq	Code Dev.	Comments
1-QT-130-AB1	1-5151B (D9) 0	Yes	Yes	Yes	No	No	Q		Group B Test
AB EMERGENCY DIESE #1	L JACKET W	ATER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
1-QT-130-AB2	1-5151B (C9) 0	Yes	Yes	Yes	No	No	Q		Group B Test
AB EMERGENCY DIESE	L JACKET W	ATER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
1-QT-130-CD1	1-5151D (D9) 0	Yes	Yes	Yes	No	No	Q		Group B Test
CD EMERGENCY DIESE #1	L JACKET W	ATER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
1-QT-130-CD2	1-5151D (C9) 0	Yes	Yes	Yes	No	No	Q		Group B Test
CD EMERGENCY DIESE #2	L JACKET W	ATER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
2-QT-130-AB1	2-5151B (D9) 0	Yes	Yes	Yes	No	No	Q		Group B Test
AB EMERGENCY DIESE	L JACKET W	ATER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
2-QT-130-AB2	2-5151B (C9) 0	Yes	Yes	Yes	No	No	Q		Group B Test
AB EMERGENCY DIESE #2	L JACKET W	ATER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Ttest
2-QT-130-CD1	2-5151D (D9) 0	Yes	Yes	Yes	No	No	Q		Group B Test
CD EMERGENCY DIESE #1	L JACKET W	ATER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
2-QT-130-CD2	2-5151D (C9) 0	Yes	Yes	Yes	No	No	Q		Group B Test
CD EMERGENCY DIESE #2	L JACKET W	ATER PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test

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Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: ESW - Essential Service Water

			Inse	rvice	Test P	arame	eters			
Component	PID(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq	Code Dev.	Comments
1-PP-7E	1-5113 (A3)	3	Yes	Yes	Yes	Yes	No	Q	REL - PP2	Group A Test, Vertical Line shaft pump
EAST ESSENTIAL SERV	ICE WATER PI	JMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
1-PP-7W	1-5113 (A7)	3	Yes	Yes	Yes	Yes	No	Q	REL - PP2	Group A Test, Vertical Line shaft pump
WEST ESSENTIAL SERV	/ICE WATER P	PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
2-PP-7E	2-5113 (A3)	3	Yes	Yes	Yes	Yes	No	Q	REL - PP2	Group A Test, Vertical Line shaft pump
EAST ESSENTIAL SERV	ICE WATER P	UMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test
2-PP-7W	2-5113 (A7)	3	Yes	Yes	Yes	Yes	No	Q	REL - PP2	Group A Test, Vertical Line shaft pump
WEST ESSENTIAL SERV	/ICE WATER F	PUMP	Yes	Yes	Yes	Yes	No	2A		Comprehensive Test

7

1 12


Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: RHR - Residual Heat Removal

			Inse	rvice	Test P	arame	eters			
Component	(PID(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq	Code Dev.	Comments
1-PP-35E	1-5143 (HI)	2	Yes	Yes	Yes	Yes	No	Q	REL - PP3	Group A Test
EAST RESIDUAL HEAT	REMOVAL PUMP		Yes	Yes	Yes	Yes	No	2A	REL - PP3	Comprehensive Test
1-PP-35W	1-5143 (H4)	,2	Yes	Yes	Yes	Yes	No	Q	REL - PP3	Group A Test
WEST RESIDUAL HEAT	REMOVAL PUMP		Yes	Yes	Yes	Yes	No	2A	REL - PP3	Comprehensive Test
2-PP-35E	2-5143 (H1)	2	Yes	Yes	Yes	Yes	No	Q	REL - PP3	Group A Test
EAST RESIDUAL HEAT	REMOVAL PUMP		Yes	Yes	Yes	Yes	No	2A	REL - PP3	Comprehensive Test
2-PP-35W	2-5143 (H4)	2	Yes	Yes	Yes	Yes	No	Q	REL - PP3	Group A Test
WEST RESIDUAL HEAT	REMOVAL PUMF		Yes	Yes	Yes	Yes	No	2A	REL - PP3	Comprehensive Test

8

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Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: SI - Safety Injection

			Inse	ervice	Test P	aram	eters				
Component	PID(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq	Code Dev.	Comments	
1-PP-26N NORTH SAFETY INJEC	1-5142 (F9) CTION PUMP	2	Yes Yes	Yes Yes	Yes Yes	No Yes	No No	Q 2A		Group B Test Comprehensive Test	
1-PP-26S SOUTH SAFETY INJEC	1-5142 (J9) CTION PUMP	2	Yes Yes	Yes Yes	Yes Yes	No Yes	No No	Q 2A		Group B Test Comprehensive Test	
2-PP-26N NORTH SAFETY INJEC	2-5142 (F9) CTION PUMP	2	Yes Yes	Yes Yes	Yes Yes	No Yes	No No	Q 2A		Group B Test Comprehensive Test	
2-PP-26S SOUTH SAFETY INJEC	2-5142 (J9) CTION PUMP	2	Yes Yes	Yes Yes	Yes Yes	No Yes	No No	Q 2A		Group B Test Comprehensive Test	

11

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Fourth Ten Year Interval Program Information Inservice Test Plan Pump Table

SYSTEM: SPENT - S	pent Fuel Pool C	ooling an	d Clean	ıp						
			Inse	ervice	Test P	aramo	eters			
Component	PID(Coord)	Code Class	Disc. Press	DP	Flow	VIB	Speed	Freq	Code Dev.	Comments
12-PP-31N NORTH SPENT FUEL	12-5136 (J5) PIT PUMP	3	Yes Yes	Yes Yes	Yes Yes	Yes Yes	No No	Q 2A		Group A Test Comprehensive Test
12-PP-31S SOUTH SPENT FUEL	PIT PUMP	3	Yes Yes	Yes Yes	Yes Yes	Yes Yes	No No	Q 2A		Group A Test Comprehensive Test

Revision 4

e 11

12

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: AFW - Auxiliary Feedwater

		••••••••••••••••••••••••••••••••••••••	Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
12-CRV-51	1-5106A (M9)	PASSIVE	3	GLB	AO	В	8	С	С	PIT	2A		· · ·
UNIT 1 & UNIT 2	CONDENSATE S	STORAGE TA	ANKS C	ROSS	TIE SHUT	OFF	VALV	Έ					
1-FMO-211	1-5106A (J4)	ACTIVE	3	GLB	MO	В	4	0	Al	DIAG	9A		· · · · · · · · · · · · · · · · · · ·
TURBINE DRIVE	N AUXILIARY FE ME-3-1 CONTROL	ED PUMP P _ VALVE	P-4 DIS	CHAR	GE TO ST	EAM				FSE	18M		OMN-1
1-FMO-212	1-5106A (J5)	ACTIVE	3	GLB	МО	В	4	0	Al	DIAG	9A		
WEST MOTOR D	RIVEN AUXILIAF ME-3-1 CONTROI	RY FEEDWA L VALVE	TER PL	JMP SI	UPPLY TO) STE	AM			FSE	18M		OMN-1
1-FMO-221	1-5106A (F5)	ACTIVE	3	GLB	MO	В	4	0	AI	DIAG	9A		
TURBINE DRIVE	N AUXILIARY FE ME-3-2 CONTROI	ED PUMP P VALVE	P-4 DIS	CHAR	GE TO ST	EAM				FSE	18M		OMN-1
1-FMO-222	1-5106A (F6)	ACTIVE	3	GLB	MO	В	4	0	Al	DIAG	9A		
EAST MOTOR DI GENERATOR #2	RIVEN AUXILIAR	Y FEEDWA [.] /E	TER PU	MP PF	-3E SUPF	PLY T	O STI	EAM		FSE	18M		OMN-1
1-FMO-231	1-5106A (F5)	ACTIVE	3	GLB	MO	В	4	0	AI	DIAG	9A		· · ·
TURBINE DRIVE OME-3-3 CONTR	N AUXILIARY FE	ed pump s	UPPLY	TO ST	EAM GEN	IERA ⁻	TOR			FSE	18M		OMN-1
1-FMO-232	1-5106A (F6)	ACTIVE	3	GLB	MO	B	4	0	AI	DIAG	9A		
EAST MOTOR D GENERATOR #3	RIVEN AUXILIAR	Y FEEDWA [.] /E	ter pu	MP PF	P-3E SUPF	PLY T	O ST	EAM		FSE	18M	·	OMN-1
1-FMO-241	1-5106A (J5)	ACTIVE	3	GLB	MO	∕ B	4	0	Al	DIAG	9A		
TURBINE DRIVE	N AUXILIARY FE ROL VALVE	ED PUMP S	UPPLY	TO ST	EAM GEN	IERA ⁻	TOR			FSE	18M		OMN-1
1-FMO-242	1-5106A (J5)	ACTIVE	3	GLB	MO	В	4	0	AI	DIAG	9A		
WEST MOTOR D	RIVEN AUXILIAN ME-4-4 CONTRO	RY FEEDWA		JMP S	UPPLY TO	STE	AM			FSE	18M		OMN-1



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: AFW - Auxiliary Feedwater

			Code					Posi	ion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-FRV-247	1-5106A (C8)	ACTIVE	3	GLB	AO	В	1	0	0	FSE	Q		
WEST MOTOR		Y FEED PU	IMP PP.	-3W EN		YLE	AKOF	F		FST	Q		
VALVE	·							•		ST-C	Q		
										ST-O	Q		
										PIT	2A		
1-FRV-256	1-5106A (J8)	ACTIVE	3	GLB	AO	В	2	C	С	FSE	Q		
TURBINE DRIVE	N AUXILIARY FE	ED PUMP P	P-4 TE	ST VAI	VF					FST	Q		
			••••		· · -					ST-C	Q		
		- <u>.</u>								ST-O	Q		
										PIT	2A		
1-FRV-257	1-5106A (F8)	ACTIVE	3	GLB	AO	В	1	0	0	FSE	Q		
FAST MOTOR D					-3F EMER	RGEN	CY			FST	Q		
LEAKOFF VALV	E						01			ST-C	Q		
			• •							ST-O	Q		
										PIT	2A		
1-FRV-258	1-5106A (J9)	ACTIVE	3	GLB	AO	В	1	0	0	FSE	Q	-	
			MERGE		FAKOFE		Ē			FST	Q		
							-			ST-C	Q		
										ST-O	Q		
										PIT	2A		
1-FW-124	1-5106A (H7)	ACTIVE	3	CHK	SA	С	8	O/C		FS-C	R	ROJ - 026	Condition Monitoring Program
FAST MOTOR D					-3F SUCT		CHEC	ĸ		FS-O	R	ROJ - 026	
VALVE					02 0001					FS-O	Q		· · · · ·
1-FW-128	1-5106A (F8)	ACTIVE	3	CHK	SA	С	6	O/C		FS-C	Q		
' EAST MOTOR D	RIVEN AUXILIAR	Y FEEDWA	TER PL	IMP PF	9-3E DISC	HARC	SE CH	ECK		FS-O	Q		Condition Monitoring Program
1-FW-132-1	1-5106A (H5)	ACTIVE	2	CHK	SA	С	4	O/C		FS-C	Q		
WEST MOTOR		D PUMP SI				RAT	OR #1			FS-C	С		Condition Monitoring Program
CHECK VALVE									· · ·	FS-O	С	CSJ - 001	· · · · · · · · · · · · · · · · · · ·



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: AFW - Auxiliary Feedwater

		مىدىيە 110 ئىرىسىرىزىنىدىرىيا ر	Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-FW-132-2	1-5106A (F6)	ACTIVE	2	СНК	SA	С	-4	O/C		FS-C	Q		
FAST MOTOR D		Y FFFDWA	TER PU	MP PP	-3E SUPP	IYT	O STE	=AM		FS-C	С		Condition Monitoring Program
GENERATOR #2	CHECK VALVE				02 001 1		0.011			FS-O	С	CSJ - 001	
1-FW-132-3	1-5106A (F6)	ACTIVE	2	CHK	SA	С	4	0/C		FS-C	Q		
FAST MOTOR D		Y FEEDWA	TER PU	MP PP	-3E SUPP	LYT	O STE	EAM		FS-C	С		Condition Monitoring Program
GENERATOR #3	CHECK VALVE									FS-O	С	CSJ - 001	
1-FW-132-4	1-5106A (H5)	ACTIVE	2	CHK	SA	C	4	O/C		FS-C	Q		
WEST MOTOR	RIVEN AUX FEE	D PUMP SU	IPPLY T	O STE		RAT	OR #4	L I		FS-C	С		Condition Monitoring Program
CHECK VALVE										FS-O	С	CSJ - 001	
1-FW-134	1-5106A (L9)	ACTIVE	3	CHK	SA	C	10	С		FS-C	R	ROJ - 026	Condition Monitoring Program
	N AUXILIARY FE	ED PUMP P	P-4 SU	CTION	HEADER	CHE	CKV	ALVE		FS-O	. R	ROJ - 026	
				•••••		•				PS-O	Q		Partial Stroke only if valve is disassembled
	•									FS-O	С	CSJ - 002	
1-FW-135	1-5106A (J8)	ACTIVE	3	CHK	SA	С	8	С		FS-C	Q		Condition Monitoring Program
TURBINE DRIVE	N AUXILIARY FE	ed pump p	P-4 DIS	SCHAR	GE CHEC	K VA	LVE			FS-O	С	CSJ - 002	
1-FW-138-1	1-5106A (H4)	ACTIVE	2	СНК	SA	C	4	С		FS-C	Q	. <u> </u>	Condition Monitoring Program
TURBINE DRIVE	N AUXILIARY FE	ED PUMP S	SUPPLY	TO ST	FEAM GEN		TOR			FS-C	С		
OME-3-1 CHECK	(VALVE									FS-O	С	CSJ - 003	
1-FW-138-2	1-5106A (F6)	ACTIVE	2	CHK	SA	С	4	C		FS-C	Q		Condition Monitoring Program
TURBINE DRIVE	N AUXILIARY FE	ED PUMP S		TO SI	FEAM GEN	IERA	TOR			FS-C	С		
OME-3-2 CHECK	(VALVE									FS-O	С	CSJ - 003	· · · · · · · · · · · · · · · · · · ·
1-FW-138-3	1-5106A (F5)	ACTIVE	2	CHK	SA	C	4	С		FS-C	Q		Condition Monitoring Program
TURBINE DRIVE	N AUXILIARY FE	ED PUMP S	SUPPLY	TO ST	EAM GEN	IERA	TOR			FS-C	С		
OME-3-3 CHECK	(VALVE									FS-O	С	CSJ - 003	
1-FW-138-4	1-5106A (H5)	ACTIVE	2	CHK	SA	С	4	С		FS-C	Q		Condition Monitoring Program
TUREINE DRIVE	N AUXILIARY FE	ED PUMP S	SUPPLY	TO ST	FEAM GEN	IERA	TOR			FS-C	С		
OME-3-4 CHECH	(VALVE									FS-O	<u> </u>	CSJ - 003	······································



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: AFW - Auxiliary Feedwater

	· #***_		Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
1-FW-153	1-5106A (F8)	ACTIVE	3	СНК	SA	С	1	O/C	FS-C	Q		
EAST MOTOR DI	RIVEN AUXILIARY K VALVE	FEEDWA	rer pu	MP PP	-3E EMEF	RGEN	ICY		FS-O	Q		
1-FW-159	1-5106A (C7)	ACTIVE	3	CHK	SA	С	6	O/C	FS-C	Q		
WEST MOTOR D	RIVEN AUX FEEI	d pump di	SCHAR	GE CH	ECK VAL\	/E			FS-O	Q		Condition Monitoring Program
1-FW-160	1-5106A (C8)	ACTIVE	3	CHK	SA	С	1	O/C	FS-C	Q		
WEST MOTOR D VALVE	RIVEN AUXILIAR	Y FEED PU	MP EM	ERGE		OFF	CHEC	ж	FS-O	Q		
1-FW-161	1-5106A (E7)	ACTIVE	3	CHK	SA	С	8	0/C	FS-C	R	ROJ - 026	Condition Monitoring Program
WEST MOTOR D	RIVEN AUX FEEI	D PUMP SU	CTION	CHECI	K VALVE				FS-O	R	ROJ - 026	
									FS-O	Q		
1-FW-263	1-5106A (H8)	ACTIVE	3	GLB	MAN	В	3	C	FSE	2A		
TURBINE DRIVE	N AUX FEED PUN	MP TEST V	ALVE 1-	FRV-2	56 OUTLE	T SH	UTOF	F				
1-SV-140-1	1-5106A (M2)	ACTIVE	3	REL	SA	С	0.75	С	SVT	10A		
TURBINE DRIVE	N AUX FEED PUN ALVE	MP GOVER	NOR OI	L COO	LER COO	LING	WAT	ER				
1-SV-140-2	1-5106A (L2)	ACTIVE	3	REL	SA	С	0.75	С	SVT	10A		a an the second s
TURBINE DRIVE VALVE	N AUX FEED PUN	MP OIL COO	OLER C	OOLIN	G WATEF	RINLE	ET SA	FETY				
1-SV-169E	1-5106A (G8)	ACTIVE	3	REL	SA	С	0.75	С	SVT	10A	·	· · · · · · · · · · · · · · · · · · ·
EAST MOTOR D	RIVEN AUXILIAR	Y FEEDWA	TER PU	MP PP	-3E SUCI	ION	SAFE	TY				
1-SV-169W	1-5106A (D8)	ACTIVE	3	REL	SA	С	0.75	C	SVT	10A		
WEST MOTOR D	RIVEN AUXILIAR	Y FEED PU	IMP PP	-3W SL	JCTION S	AFET	Y VAI	LVE				
2-FMO-211	2-5106A (B4)	ACTIVE	3	GLB	MO	В	4	O AI	DIAG	9A		
TURBINE DRIVE	N AUXILIARY FEI /IE-3-1 CONTROL	ed pump p . Valve	P-4 DIS	CHAR	GE TO ST	EAM	i		FSE	18M		OMN-1

4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: AFW - Auxiliary Feedwater

			Code					Posi	tion			Code		· · · · · · · · · · · · · · · · · · ·	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments	
2-FMO-212	2-5106A (B4)	ACTIVE	3	GLB	МО	B	4	0	AI	DIAG	9A				
WEST MOTOR GENERATOR C	DRIVEN AUXILIAF DME-3-1 CONTROL	RY FEEDWA _ VALVE	TER PL	JMP S	UPPLY TO	STE	AM			FSE	18M		OMN-1		
2-FMO-221	2-5106A (C5)	ACTIVE	3	GLB	MO	В	4	0	Al	DIAG	9A	·			
TURBINE DRIV	EN AUXILIARY FE DME-3-2 CONTROL	ed pump f . Valve	P-4 DIS	CHAR	GE TO ST	EAM				FSE	18M		OMN-1		
2-FMO-222	2-5106A (C5)	ACTIVE	3	GLB	MO	В	4	0	AI	DIAG	9A			······································	
EAST MOTOR I GENERATOR #	DRIVEN AUXILIAR 2 CONTROL VALV	Y FEEDWA /E	ter pu	MP PF	P-3E SUPF	LY T	O STI	EAM		FSE	18M		OMN-1		
2-FMO-231	2-5106A (C5)	ACTIVE	3	GLB	MO	В	4	0	Âİ	DIAG	9A				
TURBINE DRIV OME-3-3 CONT	EN AUXILIARY FE ROL VALVE	ed pump s	SUPPLY	TO ST	EAM GEN	ERA	FOR			FSE	18M		OMN-1		
2-FMO-232	2-5106A (C5)	ACTIVE	3	GLB	MO	В	4	0	AI	DIAG	9A			· · · · · · · · · · · · · · · · · · ·	
EAST MOTOR I GENERATOR #	DRIVEN AUXILIAR 13 CONTROL VALV	Y FEEDWA /E	TER PU	MP PF	P-3E SUPF	LY T	O STI	EAM		FSE	18M		OMN-1		
2-FMO-241	2-5106A (B4)	ACTIVE	3	GLB	MO	В	4	0	AI	DIAG	9A				
TURBINE DRIV OME-3-4 CONT	EN AUXILIARY FE ROL VALVE	ED PUMP S	SUPPLY	TO ST	FEAM GEN	IERA [.]	TOR			FSE	18M		OMN-1		
2-FMO-242	2-5106A (B4)	ACTIVE	3	GLB	MO	В	4	0	AI	DIAG	9A				
WEST MOTOR GENERATOR #	DRIVEN AUXILIAR	ry feedw/ /e	ATER PI	JMP S	UPPLY TO) STE	AM			FSE	18 M		OMN-1		
2-FRV-247	2-5106A (M8)	ACTIVE	3	GLB	AO	В	1	0	0	FSE	Q			·····	
WEST MOTOR	DRIVEN AUXILIAF	RY FEED PL		-3W EI	MERGENC	Y LE	AKOI	FF		FST	Q				
VALVE	•									ST-C	Q				
	i	•								ST-O	Q				
<u> </u>	· · · · · · · · · · · · · · · · · · ·									PIT	2A				
,															



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: AFW - Auxiliary Feedwater

	<u> </u>		Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-FRV-256	2-5106A (E9)	ACTIVE	3	GLB	AO	В	2	С	С	FSE	Q		
TURBINE DRIVI	EN AUXILIARY FE	ED PUMP P	P-4 TE		VE					FST	Q		· · · · · · · · · · · · · · · · · · ·
										ST-C	Q		•
										ST-O	Q		
										PIT	2A		
2-FRV-257	2-5106A (H8)	ACTIVE	3	GLB	AO	В	1	0	0	FSE	Q		
EAST MOTOR D	RIVEN AUXILIAR	Y FEEDWA	TER PU	IMP PP	-3E EMER	RGEN	ICY			FST	Q		
LEAKOFF VALV	Έ						U			ST-C	Q		· · · · · ·
										ST-O	Q		
										PIT	2A		
2-FRV-258	2-5106A (E8)	ACTIVE	3	GLB	AO	B	1	0	0	FSE	Q		
TURBINE DRIV	EN AUXILIARY FE		MERG		FAKOFE		/F			FST	Q		
						•/ •= •	-			ST-C	Q.		
								•		ST-O	Q		
										PIT	2A		
2-FW-124	2-5106A (E7)	ACTIVE	3	CHK	SA	С	8	O/C		FS-C	R	ROJ - 026	Condition Monitoring Program
EAST MOTOR	ORIVEN AUXILIAR	Y FEEDWA	TER PU	IMP PP	-3E SUCT		CHEC	ж		FS-O	R	ROJ - 026	
VALVE										FS-O	Q		
2-FW-128	2-5106A (H8)	ACTIVE	3	CHK	SA	С	6	O/C		FS-C	Q		
EAST MOTOR I	DRIVEN AUXILIAR	Y FEEDWA	TER PL	IMP PF	-3E DISC	HARC	ge cł	HECK		FS-O	Q		Condition Monitoring Program
2-FW-132-1	2-5106A (C4)	ACTIVE	2	CHK	SA	С	4	O/C		FS-C	Q		
WEST MOTOR				TO STE		RAT	0R #	1		FS-C	C		Condition Monitoring Program
CHECK VALVE								•		FS-O	C	CSJ - 001	
2-FW-132-2	2-5106A (D5)	ACTIVE	2	CHK	SA	С	4	O/C		FS-C	Q		it is a the standard
FAST MOTOR (-3F SHIPE			EVW		FS-C	С		Condition Monitoring Program
GENERATOR #	2 CHECK VALVE						001			FS-O	С	CSJ - 001	
2-FW-132-3	2-5106A (D5)	ACTIVE	2	CHK	SA	С	4	O/C		FS-C	Q		
EAST MOTOR		Y FEEDWA	TER PL	IMP PF	-3F SUP	лут		FAM		FS-C	С		Condition Monitoring Program
GENERATOR #	3 CHECK VALVE						001			FS-O	С	CSJ - 001	
Revision 4							· · · · ·						



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: AFW - Auxiliary Feedwater

		A.	Code					Pos	ition	•		Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
2-FW-132-4	2-5106A (C4)	ACTIVE	2	СНК	SA	С	4	0/C		FS-C	Q		
WEST MOTOR D	RIVEN AUX FEE	D PUMP SU	PPLY T	O STE	AM GENE	RATO	DR #4	i -		FS-C	С		Condition Monitoring Program
CHECK VALVE								•		FS-O	С	CSJ - 001	
2-FW-134	2-5106A (B9)	ACTIVE	3	CHK	SA	C	. 10	C		FS-C	R	ROJ - 026	Condition Monitoring Program
TURBINE DRIVE	N AUXILIARY FE	ED PUMP P	P-4 SU	CTION	HEADER	CHE	CKV	ALVE		FS-O	R	ROJ - 026	
	· .									PS-O	Q		Partial Stroke only if valve is disassembled
										FS-O	C	CSJ - 002	· · · · · · · · · · · · · · · · · · ·
2-FW-135	2-5106A (E8)	ACTIVE	3	CHK	SA	С	8	C		FS-C	Q		
TURBINE DRIVE	N AUXILIARY FE	ED PUMP P	P-4 DIS	CHAR	GE CHEC	K VAI	LVE			FS-O	С	CSJ - 002	Condition Monitoring Program
2-FW-138-1	2-5106A (C4)	ACTIVE	2	СНК	SA	С	4	C		FS-C	Q		
TURBINE DRIVE	N AUXILIARY FE	ED PUMP S		TO ST	EAM GEN		TOR			FS-C	С		Condition Monitoring Program
OME-3-1 CHECK	VALVE									FS-O	С	CSJ - 003	
2-FW-138-2	2-5106A (D5)	ACTIVE	2	CHK	SA	С	4	C		FS-C	Q		
TURBINE DRIVE	N AUXILIARY FE	ED PUMP S		TO ST	EAM GEN	IERA	TOR			FS-C	С		Condition Monitoring Program
OME-3-2 CHECK	VALVE									FS-O	С	CSJ - 003	
2-FW-138-3	2-5106A (D5)	ACTIVE	2	CHK	SA	С	4	C		FS-C	Q		
TURBINE DRIVE	N AUXILIARY FE	ED PUMP S		TO ST		ERA	TOR			FS-C	С		Condition Monitoring Program
OME-3-3 CHECK	VALVE									FS-O	С	CSJ - 003	
2-FW-138-4	2-5106A (C4)	ACTIVE	2	CHK	SA	С	4	C		FS-C	Q		
TURBINE DRIVE	N AUXILIARY FE			TO SI		IERA	TOR			FS-C	С		Condition Monitoring Program
OME-3-4 CHECK	VALVE									FS-O	С	CSJ - 003	
2-FW-153	2-5106A (H8)	ACTIVE	3	CHK	SA	С	1	0/0	;	FS-C	Q		
EAST MOTOR D	RIVEN AUXILIAR	Y FEEDWA	ter pu	IMP PF	P-3E EMER	RGEN	ICY	÷		FS-O	Q		
2-FW-159	2-5106A (L8)	ACTIVE	3	CHK	SA	С	6	0/0		FS-C	Q		
WEST MOTOR [DRIVEN AUX FEE	d pump di	SCHAR	GE CH		/E				FS-O	Q		Condition Monitoring Program



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: AFW - Auxiliary Feedwater

.			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail	. Test	Freq	Dev.	Comments
2-FW-160	2-5106A (M9)	ACTIVE	3	СНК	SA	С	1	O/C	FS-C	Q		· · · ·
WEST MOTOR D	ORIVEN AUXILIAR	Y FEED PU	MP EM	ERGEI	NCY LEAK	OFF	CHEC	CK	FS-O	Q		
2-FW-161	2-5106A (J7)	ACTIVE	3	CHK	SA	С	8	0/C	FS-C	R	ROJ - 026	Condition Monitoring Program
WEST MOTOR	DRIVEN AUX FEE	D PUMP SU	CTION	CHEC					FS-O	R	ROJ - 026	
									FS-O	Q		
2-FW-263	2-5106A (F9)	ACTIVE	3	GLB	MAN	В	3	С	FSE	2A		
TURBINE DRIVE	N AUX FEED PU	MP TEST V	ALVE 2-	FRV-2	45 OUTLE	T SH	UTOF	F				
2-SV-140-1	2-5106A (E1)	ACTIVE	3	REL	SA	С	0.75	5 C	SVT	10A		
TURBINE DRIVE	N AUX FEED PUI /ALVE	MP GOVER	NOR OI	L COO	LER COO	LING	WAT	ER				
2-SV-140-2	2-5106A (D1)	ACTIVE	3	REL	SA	С	0.75	5 C	SVT	10A		· · · · · · · · · · · · · · · · · · ·
TURBINE DRIVE	N AUX FEED PU	MP OIL COO	DLER C	oolin	G WATEF	r inle	ET SA	FETY				
2-SV-169E	2-5106A (G8)	ACTIVE	3	REL	SA	С	0.75	5 C	SVT	10A		
EAST MOTOR D	RIVEN AUXILIAR	Y FEEDWA	TER PU	MP PF	P-3E SUCT		SAFE	TY				
2-SV-169W	2-5106A (K8)	ACTIVE	3	REL	SA	С	0.75	5 C	SVT	10A	· · · · · · · · · · · · · · · · · · ·	
WEST MOTOR	ORIVEN AUXILIAF	RY FEED PL	IMP PP	-3W SI	JCTION S	AFET	YVA	LVE				

8

Revision 4

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Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Positi	on			Code	
Component	PID(Coord)	Function	Class	Турө	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CA-554	1-5120D (J4)	ACTIVE	0	СНК	SA	С	.5	0		BDT-O	С		
CONTAINMENT	85 PSI CONTROL VALVE	AIR RING I	HEADE	R #2 T(O CONTR	ol V/	ALVE	•		FS-C	С	CSJ - 018	
1-CA-565	1-5120D (L4)	ACTIVE	0	CHK	SA	С	.5	0		BDT-O	С		
CONTAINMENT & NRV-152 CHECK	85 PSI CONTROL VALVE	AIR RING I	HEADE	r #2 T	O CONTR	ol V/	ALVE			FS-C	С	CSJ - 018	
1-CA-7151	1-5120NN (D8)	ACTIVE	0	CHK	SA	С	.5	O/C		FS-C	Q		
ESW STRAINER	1-OME-34W BAC	KWASH CO	ONTRO	l air c	CHECK VA	LVE				FS-O	Q		
1-CA-7157	1-5120NN (D8)	ACTIVE	0	CHK	SA	С	.5	O/C		FS-C	Q		
ESW STRAINER	1-OME-34E BACI	KWASH CO	NTROL	AIR C	HECK VA	LVE				FS-0	Q		
1-PA-343	12-5120B (B7)	ACTIVE	2	СНК	SA	AC	2	O/C		BDT-O	R		
PLANT AIR TO C			SCON	TAINM	ENT CHE	CKV	ALVE			FS-C	R	ROJ - 016	Condition Monitoring Program
				.,						LJ	R		
1-PCR-40	12-5120B (D7)	ACTIVE	2	GAT	AO	Α	2	0/C	С	FSE	Q		
PLANT AIR TO C	ONTAINMENT AI	R SERVICE	S CON	TAINM	ENT ISOL	ATIO	N VA	LVE		FST	Q		
				••						ST-C	Q		
•										IJ	OPB		
										PIT	2A		
1-SV-171-4	1-5120D (K1)	ACTIVE	0	REL	SA	С	.25	Ċ		SVT	10A		
BACKUP AIR TO	1-NRV-152 RELI	EF VALVE									•		
1-SV-171-5	1-5120D (F1)	ACTIVE	0	REL	SA	С	.25	С		SVT	10A		
BACKUP AIR TO	1-NRV-153 RELI	EF VALVE		•									
1-SV-323	1-5120E (C9)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A		· · · · · · · · · · · · · · · · · · ·
CONTAINMENT	50 PSI CONTROL	AIR RING	HEADE	R #1 S	AFETY VA	ALVE							· · · · · · · · · · · · · · · · · · ·



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
1-SV-324	1-5120E (F7)	ACTIVE	0	REL	SA	С	1.5	С	SVT	10A		
CONTAINMENT 8	5 PSI CONTROL	AIR RING I	HEADE	R #1 S	AFETY VA	LVE						
1-SV-325	1-5120D (F7)	ACTIVE	0	REL	SA	С	1.5	C	SVT	10A	<u> </u>	
CONTAINMENT 8	5 PSI CONTROL	AIR RING I	HEADEI	R #2 S	AFETY VA	LVE						
1-SV-326	1-5120D (E9)	ACTIVE	0	REL	SA	С	1.5	С	SVT	10A	<u> </u>	
CONTAINMENT 5	0 PSI CONTROL	AIR RING I	HEADEI	R #2 S	AFETY VA	LVE						
1-SV-327	1-5120E (C9)	ACTIVE	0	REL	SA	С	1.5	C	SVT	10A		
CONTAINMENT 5	0 PSI CONTROL		HEADEI	r #1 S	AFETY VA	LVE						
1-SV-328	1-5120E (F6)	ACTIVE	0	REL	SA	С	1.5	С	SVT	10A	<u> </u>	
CONTAINMENT 8	5 PSI CONTROL	AIR RING	HEADE	R #1 S	AFETY VA	LVE						
1-SV-329	1-5120D (F6)	ACTIVE	0	REL	SA	С	1.5	С	SVT	10A		
CONTAINMENT 8	85 PSI CONTROL		HEADE	R #2 S	AFETY VA	LVE		· .				
1-SV-330	1-5120D (E8)	ACTIVE	0	REL	SA	С	1.5	С	SVT	10A		
CONTAINMENT	50 PSI CONTROL	AIR RING	HEADE	R #2 S	AFETY VA	LVE						
1-SV-346	1-5120NN (D9)	ACTIVE	0	REL	SA	С	.5	С	SVT	10A		
ESW STRAINERS	S BACKWASH CO SSURE RELIEF \	ONTROL AI /ALVE	R BACK	-UP A		y tan	NK					
-1-SV-347	1-5120NN (D9)	ACTIVE	0	REL	SA	С	.5	С	SVT	10A		
ESW STRAINER	S BACKWASH CO SSURE RELIEF \	ONTROL AI	R BACK	-UP A	IR SUPPL	Y TAN	NK					

AED AMERICAN" ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size I	Norm.	Fail.	Test	Freq	Dev.	Comments
1-XCR-100	12-5120 (D4)	ACTIVE	2	GLB	AO	A	1	0	С	IJ	OPB		
100 PSI CONTR	OL AIR TO CONT	AINMENT C	ONTRO	LAIR	HEADER	#2 TR	RAIN 'A'			FSE	С	CSJ - 004	
CONTAINMENT	ISOLATION VALV	/E	•••••				/ -			FST ···	С	CSJ - 004	
							•			ST-C	C	CSJ - 004	
										PIT	2A		
1-XCR-101	12-5120 (D4)	ACTIVE	2	GLB	AO	Α	1	0	С	LJ	OPB		
100 PSI CONTR	OL AIR TO CONT		ONTRO			#2 TR	AIN 'B'			FSE	С	CSJ - 004	
CONTAINMENT	ISOLATION VAL	/E					· · · · ·			FST	С	CSJ - 004	
· ·				·						ST-C	С	CSJ - 004	
										ΡΙΤ	2A		
1-XCR-102	12-5120 (E4)	ACTIVE	2	GLB	AO	Α	1	0	С	LJ	OPB		
100 PSI CONTR			ONTRO			#1 TR	ימי ואומ	,		FSE	С	CSJ - 004	
CONTAINMENT	ISOLATION VAL	/E				15 8 9 9	• • • • • • •			FST	С	CSJ - 004	
		· —								ST-C	С	CSJ - 004	
										PIT	2A		
1-XCR-103	12-5120 (E4)	ACTIVE	2	GLB	AO	A	1	0	С	LJ	OPB		,
			ONTRO			#1 T6				FSE	С	CSJ - 004	
CONTAINMENT	ISOLATION VAL	/E				#1 II				FST	С	CSJ - 004	
	· · · · · · · · · · · · · · · · · · ·									ST-C	С	CSJ - 004	
										PIT	2A		
2-CA-711	2-5120D (J3)	ACTIVE	0	CHK	SA	C	.5	0		BDT-O	С		
CONTAINMENT	85 PSI CONTROL		HEADE	R #2 T						FS-C	С	CSJ - 018	
NRV-152 CHEC	K VALVE												
2-CA-713	2-5120D (J3)	ACTIVE	0	СНК	SA	C	.5	0		BDT-O	C		· · · · · · · · · · · · · · · · · · ·
CONTAINMENT	85 PSI CONTROI	L ÀIR RING	HEADE	R #TO	CONTRO	L VAI	LVE			FS-C	С	CSJ - 018	
2-CA-7151	2-5120JJ (F8)	ACTIVE	0	CHK	SA	С	.5	0/C		FS-C	Q		
ESW STRAINE	R 2-OME-34W BA	CKWASH C	ONTRO	LAIR	CHECK V	ALVE				FS-O	Q	• •	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CAS - Compressed Air System

······································			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-CA-7157	2-5120JJ (F8)	ACTIVE	0	СНК	SA	С	.5	O/C		FS-C	Q		
ESW STRAINER	R 2-OME-34E BACI	KWASH CO	NTROL	AIR C	HECK VA	LVE				FS-O	Q		
2-PA-342	12-5120B (K7)	ACTIVE	2	СНК	SA	AC	2	O/C		BDT-O	R	·····	
PLANT AIR TO	CONTAINMENT AI	R SERVICE	S CON	TAINM	ENT CHE		ALVE			FS-C	R	ROJ - 016	Condition Monitoring Program
										LJ	R		
2-PCR-40	12-5120B (H7)	ACTIVE	2	GAT	AO	Α	2	O/C	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
PLANT AIR TO	CONTAINMENT AI	R SERVICE	S CON	TAINM	ENT ISOL	ATIO		VE		FST	Q		
								_		ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-SV-171-4	2-5120D (F1)	ACTIVE	0	REL	SA	С	.25	С		SVT	10A		
BACKUP AIR TO	0 2-NRV-152 RELII	ef valve											
2-SV-171-5	2-5120D (K1)	ACTIVE	0	REL	SA	С	.25	С		SVT	10A		
BACKUP AIR TO	0 2-NRV-153 RELI	EF VALVE											
2-SV-305	2-5120E (C8)	ACTIVE	0	REL	SA	С	1.5	C	· · · · · · · ·	SVT	10A		
CONTAINMENT	50 PSI CONTROL	AIR RING	HEADE	R #1 S	AFETY VA	LVE							
2-SV-306	2-5120E (G6)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A		· · · · · · · · · · · · · · · · · · ·
CONTAINMENT	85 PSI CONTROL	AIR RING	HEADE	R #1 S	AFETY VA	LVE							
2-SV-307	2-6120D (F8)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A	<u> </u>	
CONTAINMENT	50 PSI CONTROL	AIR RING	HEADE	R #2 S	AFETY VA	LVE							
2-SV-308	2-5120D (C5)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A		
CONTAINMENT	85 PSI CONTROL	AIR RING	HEADE	R #2 S	AFETY VA	LVE							

4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-SV-309	2-5120E (C9)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A		
CONTAINMENT &	50 PSI CONTROL		HEADE	R #1 S	AFETY VA	LVE							
2-SV-310	2-5120E (G7)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A		<u>````````````````````````````````</u>
CONTAINMENT 8	35 PSI CONTROL	AIR RING	HEADE	r #1 S	AFETY VA	LVE							
2-SV-311	2-5120D (F7)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A		
CONTAINMENT	50 PSI CONTROL	AIR RING	HEADE	r #2 S	AFETY VA	LVE							
2-SV-312	2-5120D (C7)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A		
CONTAINMENT 8	35 PSI CONTROL	AIR RING	HEADE	r #2 s	AFETY VA	LVE							
2-SV-346	2-5120JJ (G9)	ACTIVE	0	REL	SA	С	.5	С		SVT	10A		
ESW STRAINER	S BACKWASH C	ONTROL AI VALVE	R BACK	(-UP A	IR SUPPL	Y TAN	١K						
2-SV-347	2-5120JJ (G9)	ACTIVE	0	REL	SA	С	.5	С		SVT	10A		
ESW STRAINER	S BACKWASH C	ONTROL AI VALVE	R BACK	K-UP A	IR SUPPL	Y TAN	NK						
2-XCR-100	12-5120 (K4)	ACTIVE	2	GLB	AO	A	1	0	C	LJ	OPB	······	
100 PSI CONTRO	OL AIR TO CONT	AINMENT C	ONTRO	LAIR	HEADER :	#2 TF	RAIN '	A'		FSE	С	CSJ - 004	
CONTAINMENT	SOLATION VALV	Æ								FST	С	CSJ - 004	
										ST-C	С	CSJ - 004	
										PIT	2A		
2-XCR-101	12-5120 (K4)	ACTIVE	2	GLB	AO	Α	1	0	C	LJ	OPB		<u></u>
, 100 PSI CONTRO	OL AIR TO CONT	AINMENT C	ONTRO)L AIR	HEADER	#2 TF	RAIN '	B'		FSE	С	CSJ - 004	
CONTAINMENT	SOLATION VALV	Έ								FST	С	CSJ - 004	
· • •										ST-C	С	CSJ - 004	
. •										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CAS - Compressed Air System

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-XCR-102	12-5120 (J4)	ACTIVE	2	GLB	AO	Α	1	0	С	IJ	OPB		
100 PSI CONTRO	LAIR TO CONT		ONTRO			#1 TR		Δ'		FSE	С	CSJ - 004	
CONTAINMENT IS	SOLATION VAL	VE						•		FST	С	CSJ - 004	
										ST-C	С	CSJ - 004	
										PIT	2A		
2-XCR-103	12-5120 (J4)	ACTIVE	2	GLB	AO	A	1	0	С	LJ	OPB		
100 PSI CONTRO	LAIR TO CONT		ONTRO			#1 TR		R'		FSE	С	CSJ - 004	
CONTAINMENT IS	SOLATION VAL	VE						_		FST	С	CSJ - 004	
		i anti i di								ST-C	С	CSJ - 004	
				· .						PIT	2A		

6

Revision 4

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Posi	tion			Code	·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm	Fail.	Test	Freq	Dev.	Comments
12-CCW-170	1-5135 (G4)	ACTIVE	3	СНК	SA	С	16	0/C		FS-C	Q		If 12-PP-10 replacing 2-PP-10E
SPARE COMPO	NENT COOLING	WATER PU				CHEC		IVF		FS-C	Q		If 12-PP-10 replacing 2-PP-10W
				0 010						FS-C	Q		If 12-PP-10 replacing 1-PP-10E
										FS-C	Q		If 12-PP-10 replacing 1-PP-10W
										FS-O	Q		If 12-PP-10 replacing 2-PP-10W
										FS-O	Q		If 12-PP-10 replacing 2-PP-10E
										FS-O	Q		If 12-PP-10 replacing 1-PP-10W
								,		FS-O	Q		If 12-PP-10 replacing 1-PP-10E
12-CCW-372	2-5135B (K4)	ACTIVE	3	BTF	MAN	В	8	0		FSE	2A		
15 GPM WAST	E EVAPORATOR	CCW OUTLE	ET SHUT	OFF \	ALVE								
12-CCW-373	2-5135B (E5)	ACTIVE	3	BTF	MAN	В	8	0		FSE	2A		<u> </u>
CCW TO 15 GP		WASTE EV					=						
						,	-						
1-CCM-430	1-5135E (D6)	ACTIVE	2	GLB	MO	Α	1.5	С	AI	ĿJ	OPB		
CCW TO CONT	AINMENT HYDRO	GEN SKIM	IER VE	NT FA	N #1 MOT		IR			DIAG	1R		
COOLER CONT	FAINMENT ISOLA	TION VALVE								FSE	18M		OMN-1
1-CCM-431	1-5135E (D7)	ACTIVE	2	GLB	MO	A	1.5	C	Al	LJ	OPB		
CNTMT HYDRO	GEN SKIMMER V	ENT FAN H	V-CEQ-			DOLE	RCC	w:		DIAG	1R		
OUTLET CONT	AINMENT ISOLAT	ION VALVE								FSE	18M		OMN-1
1-CCM-432	1-5135E (L6)	ACTIVE	2	GLB	MO	A	1.5	C	Al	LJ	OPB		
CCW TO CONT		AN HV-CEC)-2 MOT	OR AI		R				DIAG	1R		
CONTAINMEN	FISOLATION VAL	VE	• — ···• ·	••••		-				FSE	18M		OMN-1
1-CCM-433	1-5135E (L7)	ACTIVE	2	GLB	MO	Α	1.5	С	Al	LJ	OPB		
	VENT FAN HV-C	FO-2 MOTO			RCCWO	UTLE	т			DIAG	1R		
CONTAINMENT	ISOLATION VAL	VE		00-12		•••=	••			FSE	18M		OMN-1
1-CCM-451	1-5135D (C1)	ACTIVE	2	BTF	MO	A	8	0	Al	FSE	R	ROJ - 023	OMN-1
RC PUMPS BE	ARING OIL COOL	FRS CCW R	ETURN	HEAD		'A'				LJ	OPB		
CONTAINMENT	ISOLATION VAL	VE								DIAG	3R		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
1-CCM-452	1-5135D (C2)	ACTIVE	2	BTF	МО	Α	8	0	AI	FSE	R	ROJ - 023	OMN-1	
RC PUMPS BEA	ARING OIL COOLE	RS CCW R	FTURN	HEAD	ER TRAIN	'B'				LJ	OPB			
CONTAINMENT	ISOLATION VALV	Έ								DIAG	3R			
1-CCM-453	1-5135D (C4)	ACTIVE	2	GLB	MO	A	4	0	AI	FSE	R	ROJ - 023	OMN-1	
RCP THERMAL	BARRIER COMPC	NENT COC	I ING V			TRAI	N 'A'			IJ	OPB			
CONTAINMENT	ISOLATION VALV	Έ								DIAG	3R			
1-CCM-454	1-5135D (C3)	ACTIVE	2	GLB	MO	Α	4	0	AI	FSE	R	ROJ - 023	OMN-1	
RC PUMPS THE	RMAL BARRIER (CCW RETU		DFR 1		ONT		FNT		LJ	OPB			
ISOLATION VAL	VE									DIAG	3R			
1-CCM-458	1-5135D (C5)	ACTIVE	2	BTF	MO	A	8	0	Al	FSE	R	ROJ - 023	OMN-1	
COMPONENT C	COOLING WATER	TO REACTO)I ANT	PUMPS T	RAIN	'A'			IJ	OPB			
CONTAINMENT	ISOLATION VALV	Æ								DIAG	3R			
1-CCM-459	1-5135D (C5)	ACTIVE	2	BTF	MO	Α	8	0	AI	FSE	R	ROJ - 023	OMN-1	
COMPONENT O	COOLING WATER	TO REACTO		DLANT	PUMPS T	RAIN	'B'			LJ	OPB			
CONTAINMENT	ISOLATION VALV	Έ								DIAG	3R			
1-CCR-440	1-5135E (D6)	ACTIVE	2	GLB	AO	Α	1.5	0	C	FSE	Q			
CONTAINMENT	PENETRATIONS	CPN-2 AND	CPN-5	INNE		G CO	ILS C	:CW		FST	Q			
OUTLET CNTM	T ISOLATION VAL	VE						•••		ST-C	Q			
										LJ	OPB			
										PIT	2A			
1-CCR-441	1-5135E (L6)	ACTIVE	2	GLB	AO	A	1.5	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·	
CONTAINMENT	PENETRATIONS	CPN-3 AND	CPN-4	INNE		G CO	ILS C	:CW		FST	Q			
OUTLET CNTM	T ISOLATION VAL	VE	•••••					••••		ST-C	Q			
*	• .									LJ	OPB			
·										PIT	2A			
r 11	· ·											· · · · · · · · · · · · · · · · · · ·		Mar



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

·····			Code					Pos	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
1-CCR-455	1-5135D (C6)	ACTIVE	2	GLB	AO	Α	2	0	С	ш	OPB		
COMPONENT (COOLING WATER	TO REACTO	OR SUP	PORT	COOLER	S				FSE	С	CSJ - 005	
CONTAINMENT	ISOLATION VALV	/E				-				FST	С	CSJ - 005	
										ST-C	С	CSJ - 005	
		1.								PIT	2A		
1-CCR-456	1-5135D (D8)	ACTIVE	2	GLB	AO	Α	2	0	С	LJ	OPB		
REACTOR SUP	PORT COOLERS	CCW RETU	RN HEA	ADER "	TRAIN 'A' (CONT		ENT		FSE	С	CSJ - 005	
ISOLATION VAL	LVE									FST	C	CSJ - 005	
										ST-C	С	CSJ - 005	
										PIT	2 A		
1-CCR-457	1-5135D (C8)	ACTIVE	2	GLB	AO	Α	2	0	С	IJ	OPB		
REACTOR SUP	PORT COOLERS	CCW RETU	RN HE		TRAIN 'B' (CONT		IENT		FSE	С	CSJ - 005	
ISOLATION VA	LVE				-					FST	С	CSJ - 005	
										ST-C	С	CSJ - 005	
										PIT	2A		
1-CCR-460	1-5135D (C9)	ACTIVE	2	GLB	AO	Α	3	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
EXCESS LETD	OWN HEAT EXCH	ANGER HE	-13 CON		ENT COOL	ING \	NATE	R		FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-CCR-462	1-5135D (C9)	ACTIVE	2	GLB	AO	A	3	0	C	FSE	Q		
COMPONENT (COOLING WATER	TO EXCES	S LETD	OWŃ		HAN	GERH	HE-13		FST	Q		
CONTAINMENT	ISOLATION VAL	/E			2					ST-C	Q		
•	•									LJ	OPB		
										PIT	2A		
1-CCW-101	1-5135B (B5)	ACTIVE	3	BTF	MAN	В	4	0		FSE	2A		· · · · · · · · · · · · · · · · · · ·
CCW TO NUCL	EAR & POST-ACC	DENT SAN	IPLING	SAMP	LE HEAT I	EXCH		ERS					



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code		· · · · ·			Positio	חר			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm. F	Fail.	Test	Freq	Dev.	Comments
1-CCW-106	1-5135B (G5)	ACTIVE	3	BTF	MAN	В	4	0		FSE	2A		
NUCLEAR SAMP	LING & POST-AC	CIDENT S	AMPLE	HEAT	EXCHANC	GERS	CCM	V					
1-CCW-107	1-5135B (B4)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CCW TO RECIPE	ROCATING CHAR	GING PUM	P BEAF	RING O	IL COOLE	RS H	E-66						
1-CCW-110	1-5135B (E4)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
RECIPROCATING SHUTOFF VALVE	G CHARGING PU	MP PP-49 (DLERS	CCW RE	TURN	HEA	DER					
1-CCW-120	1-5135C (D6)	ACTIVE	3	BTF	MAN	В	10	0		FSE	2A		······································
NORTH BORIC A	CID EVAPORATO	OR CCW R	eturn	HEADI	ER SHUTC	OFF V	ALVE	E					
1-CCW-122	1-5135D (D5)	ACTIVE	2	CHK	SA	С	8	0		BDT-C	R		
CCW TO REACT	OR COOLANT PL	JMPS CHE		VE						FS-O	Q		GL 96-06, Normal Ops
1-CCW-135	1-5135D (D6)	ACTIVE	2	CHK	SA	AC	2.5	0		FS-C	R	ROJ - 017	Condition Monitoring Program
CCW TO REACT	OR SUPPORT CO	OOLERS CH	HECK V	ALVE						LJ	R		
										FS-O	Q		GL 96-06
1-CCW-142	1-5135D (F9)	ACTIVE	2	CHK	SA	С	4	0		BDT-C	R		
CCW TO EXCES	S LETDOWN HE	AT EXCHAN	IGER H	E-13 C	HECK VA	LVE				FS-O	Q		GL 96-06
1-CCW-147	1-5135C (B5)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CCW TO RADIO	ACTIVE WASTE (HUTOFF VALVE	GAS COMP	RESSO	RS SE	AL WATEI	r he/	AT						
1-CCW-153	1-5135C (D5)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
WASTE GAS CO HEADER SHUTO	MPRESSORS SE FF VALVE	AL WATER	HEAT	EXCHA	ANGERS (CCW	RETU	IRN					
1-CCW-176E	1-5135 (G6)	ACTIVE	3	CHK	SA	С	16	O/C		FS-C	Q		
EAST COMPONE	NT COOLING W	ATER PUM	P PP-10	e dis	CHARGE	CHEC	K VA	LVE		FS-O	Q		

Donald C. Cook Nuclear Plant IST Program



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code	وراعة الأراب المتحكان				Position				Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fa	il.	Test	Freq	Dev.	Comments
1-CCW-176W	1-5135 (G7)	ACTIVE	3	СНК	SA	C .	16	O/C		FS-C	Q		
WEST COMPON	IENT COOLÍNG W	ATER PUM	P DISC	HARG	E CHECK	VALV	/E			FS-O	Q		
1-CCW-180E	1-5135A (L1)	ACTIVE	3	BTF	MAN	В	14	0		FSE	2A	· · · · · · · · · · · · · · · · · · ·	
COMPONENT C	OOLING WATER E-17E SHUTOFF	TO EAST R VALVE	esidu/	AL HEA	T REMOV	'AL H	EAT						
1-CCW-180W	1-5135A (L6)	ACTIVE	3	BTF	MAN	В	14	0		FSE	2A		
COMPONENT C	OOLING WATER HUTOFF VALVE	TO WEST F	RESIDU	AL HE/	AT REMO	VAL H	IEAT						·
1-CCW-215	1-5135 (C1)	ACTIVE	3	CHK	SA	С	4	O/C		FS-C	С	CSJ - 034	Condition Monitoring Program
COMPONENT C	OOLING WATER	SURGE TAI	NK TK-3	37 VAC	UUM BRE	AKEI	R CHI	ECK		FS-O	С	CSJ - 034	· · · · · · · · · · · · · · · · · · ·
1-CCW-224-1	1-5135D (L4)	ACTIVE	3	СНК	SA	С	2	0		FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	FOR COOLANT P	UMP PP-45-	1 THEF	RMAL E	BARRIER (CHEC	K VA	LVE	E	BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-224-2	1-5135D (E4)	ACTIVE	3	СНК	SA	С	2	0		FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	FOR COOLANT P	UMP PP-45-	2 THEF	rmal e	BARRIER	CHEC	K VA	LVE	E	BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-224-3	1-5135D (G4)	ACTIVE	3	CHK	SA	С	2	0 .		FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	TOR COOLANT P	UMP PP-45-	-3 THEF	rmal e	BARRIER	CHEC	K VA	LVE	ſ	BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-224-4	1-5135D (J4)	ACTIVE	3	CHK	SA	С	2	0		FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	TOR COOLANT P	UMP PP-45-	-4 THEF	RMAL E	BARRIER	CHEC	K VA	LVE	Í	BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-225-1	1-5135D (M4)	ACTIVE	3	CHK	SA	С	2	0		FS-C	R	ROJ - 030	Condition Monitoring Program
	TOR COOLANT P	UMP PP-45-	1 THEF	rmal e	BARRIER	CHEC	K VA	LVE	1	BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-225-2	1-5135D (E4)	ACTIVE	3	CHK	SA	С	2	0		FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	TOR COOLANT P	UMP PP-45-	-2 THEF	rmal. E	BARRIER	CHEC	CK VA	LVE	i	BDT-O	Q		BDT-O satisfied by normal system operation



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Positio	on			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CCW-225-3	1-5135D (G4)	ACTIVE	3	СНК	SA	С	2	0		FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PL	JMP PP-45-	3 THER	MAL B	ARRIER (HEC	K VA	LVE		BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-225-4	1-5135D (K4)	ACTIVE	3	СНК	SA	С	2	0		FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PL	JMP PP-45-	4 THER	MAL B	ARRIER (HEC	K VA	LVE		BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-243-25	1-5135E (B6)	ACTIVE	2	СНК	SA	AC	. 1	0		FS-C	R	ROJ - 002	Condition Monitoring Program
CCW TO CONTA		RATIONS CI	PN-2 &	CPN-5	INNER CO					LJ	R		
CHECK VALVE										BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-243-72	1-5135E (J6)	ACTIVE	2	CHK	SA	AC	1	0		FS-C	R	ROJ - 002	Condition Monitoring Program
CCW TO CONTA		RATIONS CI	DN-3 &	CPN-4	INNER CO					LJ -	R		
CHECK VALVE			n-o u	0111-7		JULI				BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-244-25	1-5135E (B6)	ACTIVE	2	CHK	SA	AC	1	0		FS-C	R	ROJ - 002	Condition Monitoring Program
CCW TO CONTA	INMENT PENET	RATIONS CI	PN-2 &	CPN-5	INNER CO	DOLI		DILS		LJ	R		
CHECK VALVE										BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-244-72	1-5135E (J6)	ACTIVE	2	CHK	SA	AC	1	0		FS-C	R	ROJ - 002	Condition Monitoring Program
CCW TO CONTA	INMENT PENET	RATIONS CI	PN-3 &	CPN-4	INNER CO	DOLI		DILS		LJ	R		
CHECK VALVE										BDT-O	Q		BDT-O satisfied by normal system operation
1-CCW-343	1-5135C (F9)	ACTIVE	3	GAT	MAN	В	2	0		FSE	2A		
1-DRA-300 SAMF VALVE	PLE HEAT EXCH	ANGERS CO	W RE	IURN H	HEADER S	SHUT	OFF						
1-CCW-348	1-5135C (H6)	ACTIVE	3	GAT	MAN	В	2	0	····	FSE	2A		
CCW TO RADIAT		ORA-300 SA	MPLE H	IEAT E	XCHANG	ERS	SHUT	OFF					
1-CCW-404E	1-5135 (L4)	ACTIVE	3	GLB	MAN	В	1	0		FSE	2A		
EAST COMPONE COOLING WATE	NT COOLING W	ATER HEAT	EXCH	ANGEF	R HE-15E	СОМ	PONE	INT			_		
1-CCW-404W	1-5135 (L9)	ACTIVE	3	GLB	MAN	В	1	0		FSE	2A		
WEST COMPON	ENT COOLING V	VATER HEA VALVE	T EXCH	IANGE	R HE-15V		MPON	IENT	<u>. </u>				

6



Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

		:	Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CCW-430E	1-5135 (C6)	ACTIVE	3	GAT	MAN	В	0.5	0		FSE	2A		
EAST CCW HEA TO CCW RETUR	T EXCHANGER (OUTLET RAI	DIATION	N ALAF	RM DETEC	TOR	CRS	-3301					
1-CCW-430W	1-5135 (C7)	ACTIVE	3	GAT	MAN	В	0.5	0		FSE	2A		
WEST CCW HE	AT EXCHANGER CW RETURN HDP	OUTLET RA		N ALA	RM DETE	CTOF	ł						
1-CMO-410	1-5135 (L6)	ACTIVE	3	BTF	MO	В	16	O/C	Al	DIAG	6R.		
EAST COMPONI	ENT COOLING W	ATER HEAT	EXCH/	ANGEF	R HE-15E	COMI	PONE	NT		FSE	18M		OMN-1
1-CMO-411	1-5135 (D6)	ACTIVE	3	BTF	MO	В	18	0	Al	DIAG	6R		· · · · · · · · · · · · · · · · · · ·
COMPONENT C	OOLING WATER	PUMPS SU	CTION	CROSS	STIE TRAI	N 'A' :	Shut	OFF		FSE	18M		OMN-1
1-CMO-412	1-5135 (H6)	ACTIVE	3	BTF	MO	В	16	0	Al	DIAG	6R		
COMPONENT C	OOLING WATER	PUMPS DIS	CHARC	BE CRO	OSSTIE TI	RAIN	'A'	•		FSE	18M		OMN-1
1-CMO-413	1-5135 (D7)	ACTIVE	3	BTF	MO	В	18	0	Al	DIAG	6R		
COMPONENT C	OOLING WATER	PUMPS SU	CTION	CROSS	STIE TRAI	N 'B' :	SHUT	OFF		FSE	18M		OMN-1
1-CMO-414	1-5135 (H7)	ACTIVE	3	BTF	MO	В	16	0	AI	DIAG	6R		
COMPONENT C	OOLING WATER	PUMPS DIS	SCHARC	BE: CR	OSSTIE TI	RAIN	'B'			FSE	18M		OMN-1
1-CMO-415	1-5135 (M6)	ACTIVE	3	BTF	MO	В	16	0	A	FSE	R	ROJ - 039	Verified by GL 89-10 (OMN-1) Program
COMPONENT C	OOLING WATER	TO MISCEL	LANEO	US SE		AIN '	Α'			DIAG	6R		
SHUTOFF VALV	Έ.									FSE	18M		OMN-1
1-CMO-416	1-5135 (M7)	ACTIVE	3	BTF	MO	B	16	0	Al	FSE	, R	ROJ - 039	Verified by GL 89-10 (OMN-1) Program
COMPONENT C	OOLING WATER	TO MISCEL	LANEO	US SE	RVICE TR	AIN '	B'			DIAG	6R		· · · · · · · · · · · · · · · · · · ·
SHUTOFF VALV	Έ									FSE	18M		OMN-1
1-CMO-419	1-5135A (L3)	ACTIVE	3	BTF	MO	В	14	С	AI	DIAG	54M		
EAST RESIDUA	L HEAT REMOVA	L HEAT EXO	CHANG	ER HE	-17E COM	IPON	ENT			FSE	18M		OMN-1
Revision 4				····									7



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	Fail.	Test	Freq	Dev.		Comments
1-CMO-420	1-5135 (L8)	ACTIVE	3	BTF	МО	В	16	O/C	AI	DIAG	6R			
WEST COMPOR	NENT COOLING V	VATER HEA TOFF VALVE	T EXCH	IANGE	R COMPC	NEN	Т ,			FSE	18M		OMN-1	
1-CMO-429	1-5135A (L7)	ACTIVE	3	BTF	MO	В	14	C	AI	DIAG	54M			
WEST RESIDUA	AL HEAT REMOV	AL HEAT EX VE	CHANG	ER CO	OMPONEN	тсо	OLIN	G		FSE	18M		OMN-1	
1-CRV-410	1-5135 (B3)	ACTIVE	3	GLB	AO	В	1.5	O/C	С	FSE	Q			u
DEMINERALIZE	D WATER TO CO	MPONENT	COOLIN	IG WA	TER SUR	GE TA	ANK T	RAIN		FST	ģ			~
'A' SHUTOFF V	ALVE									ST-C	Q			
										PIT	2A			
1-CRV-411	1-5135 (C3)	ACTIVE	3	GLB	AO	В	1.5	O/C	С	FSE	Q			· ·
DEMINERALIZE	D WATER TO CO	MPONENT	COOLIN	IG WA	TER SUR	GE TA		RAIN		FST	Q			
'B' SHUTOFF V	ALVE									ST-C	Q			
										PIT	2A			
1-CRV-412	1-5135 (D1)	ACTIVE	3	GLB	AO	В	4	0	С	FSE	Q			
COMPONENT O	COOLING WATER	SURGE TA	NK TK-3	37 VEN	IT VALVE					FST	Q			
										ST-C	Q			
										PIT	2A			
1-CRV-445	1-5135B (J3)	ACTIVE	3	GLB	AO	В	6	0	С	FSE	Q			
NORTH SPENT	FUEL PIT HEAT	EXCHANGE	R 12-HE	E-16N (COMPONE	ENT C	OOL	ING		FST	Q			
WATER OUTLE	T SHUTOFF VAL	VE								ST-C	Q			
										ST-O	Q			
										PIT	2A			
1-CRV-470	1-5135C (M4)	ACTIVE	3	GLB	AO	В	6	0	С	FSE	Q			
LETDOWN HEA	T EXCHANGER	HE-14 COMF	ONEN		LING WAT	ER O	UTLE	T		ST-C	Q			
CONTROL VAL	VE ·									FST	С	CSJ - 036	6	
										ST-C	С	CSJ - 036	6	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CRV-485	1-5135C (A6)	ACTIVE	3	BTF	AO	В	10	0	C.	FSE	Q		
		TO NORTH	BORIC			TOR	12-HI	F-19N	· .	FST	Q		· · · · ·
DRUM INLET VA	LVE		20110	1012			14-111	_ 1014		ST-C	Q		
										PIT	2A		
1-SV-122-1	1-5135E (A5)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A		GL 96-06
CONTAINMENT OUTLET SAFET	PENETRATIONS Y VALVE	CPN-2 & CF	PN-5 IN	NER C	ooling (COILS	S CCV	V					
1-SV-122-2	1-5135E (H5)	ACTIVE	0	REL	SA	С	1.5	С	_	SVT	10A		GL 96-06
CONTAINMENT OUTLET SAFET	PENETRATIONS Y VALVE	CPN-3 & CF	PN-4 IN	NER C	ooling (OILS	S CCV	V.					
1-SV-122-3	1-5135E (A6)	ACTIVE	3	REL	SA	С	1.5	С		SVT	10A		
CCW TO CONTA	INMENT VENT F	AN HV-CEC	-1 MOT	OR All	R COOLEI	RCC	W OU	ITLET					
1-SV-122-37	1-5135D (E7)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		GL 96-06
REACTOR SUPP	PORT COOLERS	CCW RETU	RN HE/	ADER S	SAFETY V	ALVE	E						
1-SV-122-4	1-5135E (H6)	ACTIVE	3	REL	SA	С	1.5	C		SVT	10A		n an
CONTAINMENT VALVE	VENT FAN HV-CI	EQ-2 MOTO	r air (COOLE	R CCW O	UTLE	T SA	FETY					
1-SV-60	1-5135 (C1)	ACTIVE	3	REL	SA	С	3	C		SVT	10A		
COMPONENT C	OOLING WATER	SURGE TA	NK TK-:	37 SAF	ETY VAL	/E							
1-SV-62-1	1-5135D (M3)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		GL 96-06
REACTOR COO	LANT PUMP PP-4	15-1 THERM	AL BAF	RIER		LET	SAFE	TY					
1-SV-62-2	1-5135D (F3)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		GL 96-06
REACTOR COO VALVE	LANT PUMP PP-4	15-2 THERM	AL BAF	RRIER		LET	SAFE	TY					



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

		· · · · · · ·	Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
1-SV-62-3	1-5135D (H3)	ACTIVE	3	REL	SA	С	1.	С	SVT	10A		GL 96-06
REACTOR COOL	ANT PUMP PP-4	5-3 THERM	AL BAR	RIER	CCW OUT	LET	SAFE	ΓY				
1-SV-62-4	1-5135D (K3)	ACTIVE	3	REL	SA	C	1	C	SVT	10A		GL 96-06
REACTOR COOL	ANT PUMP PP-4	5-4 THERM	al Bar	RIER	CCW OUT	LET	SAFE	ΤY				
1-SV-63	1-5135D (D1)	ACTIVE	3	REL	SA	С	1	C	SVT	10A		GL 96-06
REACTOR COOL HEADER SAFET	ANT PUMP MOT	ORS BEAR	NG OIL	COOL	ERS CCV	V RET	TURN					
1-SV-64	1-5135D (J8)	ACTIVE	3	REL	SA	С	1	C	SVT	10A		GL 96-06
EXCESS LETDO	WN HEAT EXCH/	ANGER HE-	13 CCV		LET SAFT	EY V/	ALVE					
1-SV-65	1-5135C (N2)	ACTIVE	3	REL	SA	С	1	С	SVT	10A		······································
LETDOWN HEAT	EXCHANGER H	E-14 CCW	OUTLE	r safe		Ξ						
1-SV-68	1-5135C (G4)	ACTIVE	3	REL	SA	С	1	С	SVT	10A	· ···	
REACTOR COOL	_ANT PUMP SEAI Y VALVE	L WATER H	EAT EX	CHAN	GER HE-1	1 CC	W					
1-SV-71	1-5135B (J1)	ACTIVE	3	REL	SA	С	1	С	SVT	10A		······································
NORTH SPENT	FUEL PIT HEAT E	XCHANGE	R 12-HE	-16N (CCW OUT	LET S	SAFE	ſY				
1-SV-72E	1-5135A (L2)	ACTIVE	3	REL	SA	С	1	С	SVT	10A		Thermal Relief
EAST RESIDUAL	HEAT REMOVA	L HEAT EX(TY VALVE	CHANG	ER HE	-17E COM	PON	ENT	· .				
1-SV-72W	1-5135A (L7)	ACTIVE	3	REL	SA	С	1	С	SVT	10A		Thermal Relief
WEST RESIDUA	L HEAT REMOVA SAFETY VALVE	L HEAT EX	CHANG	ER CO	OMPONEN	IT CC	OLIN	G				
2-CCM-430	2-5135E (D6)	ACTIVE	2	GLB	MO	Α	1.5	C Al	LJ	OPB		
CCW TO CONTA	INMENT HYDRO	GEN SKIM	IER VE	NT FA	N #1 MOT	OR A	IR 🗉		DIAG	1R		
COOLER CONT/	INMENT ISOLAT	ION VALVE						·	FSE	18M		OMN-1



Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

		ويتباد والمتحديدين التعادي	Code		وي يالي المراجع ويجنفنا			Pos	tion	ور بين		Code		
Component	PID(Coord)	Function	Class	Type	Actuator	Cat.	Size	Norm	Fail.	Test	Freq	Dev.	Comments	
2-CCM-431	2-5135E (D7)	ACTIVE	2	GLB	MO	Α	1.5	С	AI	 ມ	OPB			
CNTMT HYDRO	GEN SKIMMER VE		/-CEQ-				RCC	W		DIAG	1R			
OUTLET CONTA	INMENT ISOLATI	ON VALVE								FSE	18M		OMN-1	
2-CCM-432	2-5135E (K6)	ACTIVE	2	GLB	MO	A	1.5	С	Al	LJ	OPB			<u></u>
CCW TO CONT		AN HV-CEC	-2 MOT		R COOLE	2				DIAG	1R			
CONTAINMENT	ISOLATION VALV	Æ	2			•				FSE	18M		OMN-1	
2-CCM-433	2-5135E (K7)	ACTIVE	2	GLB	MO	A	1.5	С	AI	LJ	OPB			
CONTAINMENT	VENT FAN HV-CE			:001 F	R CCW O	ITT E	т			DIAG	1R			
CONTAINMENT	ISOLATION VALV	Æ								FSE	18M		OMN-1	
2-CCM-451	2-5135D (C1)	ACTIVE	2	BTF	MO	A	8	0	AI	FSE	R	ROJ - 023	OMN-1	
RC PUMPS BEA		RS CCW R	FTURN	HEAD	FR TRAIN	'A'				IJ	OPB			
CONTAINMENT	ISOLATION VALV	/E	210111							DIAG	3R		• • • • • • • • • • • • • • • • • • •	
2-CCM-452	2-5135D (C2)	ACTIVE	2	BTF	MO	A	8	0	AI	FSE	R	ROJ - 023	OMN-1	
RC PUMPS BEA	RING OIL COOI F	RS CCW R	ETURN	HEAD	ER TRAIN	'B'				LJ	OPB			
CONTAINMENT	ISOLATION VALV	/E				-				DIAG	3R			
2-CCM-453	2-5135D (C4)	ACTIVE	2	GLB	MO	A	4	0	Al	FSE	R	ROJ - 023	OMN-1	
RCP THERMAL	BARRIER COMPO		DI ING V	VATER		TRA	N 'A'			IJ	OPB			
CONTAINMENT	ISOLATION VAL	/E								DIAG	3R			
2-CCM-454	2-5135D (C3)	ACTIVE	2	GLB	MO	A	4	0	Al	FSE	R	ROJ - 023	OMN-1	<u> </u>
RC PUMPS THE	RMAI BARRIER	CCW RETU	RN HE		TRAIN 'B' (CONT	TAINN	IFNT		LJ	OPB			
ISOLATION VAL	.VE									DIAG	3R			•
2-CCM-458	2-5135D (C5)	ACTIVE	2	BTF	MO	A	8	0	AI	FSE	R	ROJ - 023	OMN-1	
COMPONENT		TO REACT			PUMPS T	RAIN	1 'A' I			LJ	OPB			
CONTAINMENT	ISOLATION VAL	/E	01100	-			• • •			DIAG	3R			
2-CCM-459	2-5135D (C5)	ACTIVE	2	BTF	MO	A	8	0	A	FSE	R	ROJ - 023	OMN-1	
COMPONENT		TO REACT				RAIN	I 'B'			IJ	OPB			
CONTAINMENT	ISOLATION VAL	/E								DIAG	3R			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Pos	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
2-CCR-440	2-5135E (D6)	ACTIVE	2	GLB	AO	Α	1.5	0	С	FSE	Q		
CONTAINMENT	PENETRATIONS	CPN-2 AND	CPN-5	INNEE		G CO	ILS C	CW		FST	Q		
OUTLET CNTM	FISOLATION VAL	VE	0.100					••••		ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-CCR-441	2-5135E (K6)	ACTIVE	2	GLB	AO	A	1.5	0	C	FSE	Q		
CONTAINMENT	PENETRATIONS	CPN-3 AND	CPN-4	INNEE		G CO	II S C	CW		FST	Q		
OUTLET CNTM	T ISOLATION VAL	VE					.20 0	••••		ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-CCR-455	2-5135D (C6)	ACTIVE	2	GLB	AO	Α	2	0	С	LJ	OPB		
COMPONENT		TO REACTO		PORT	COOLER:	s				FSE	С	CSJ - 005	
CONTAINMENT	ISOLATION VAL	VE			0000000	•				FST	C	CSJ - 005	
	•									ST-C	С	CSJ - 005	
										PIT	2A		
2-CCR-456	2-5135D (D8)	ACTIVE	2	GLB	AO	Α	2	0	С	LJ	OPB		
REACTOR SUP	PORT COOLERS	CCW RETU	RN HE			CONT		IENT		FSE	С	CSJ - 005	
ISOLATION VAI		00111210				00.11		100111		FST	С	CSJ - 005	
										ST-C	С	CSJ - 005	
										PIT	2A	•	
2-CCR-457	2-5135D (C8)	ACTIVE	2	GLB	AO	A	2	0	С	LJ	OPB		
REACTOR SUP	PORT COOLERS	CCW RETU	RN HE		FRAIN 'B'	CONT		IFNT		FSE	С	CSJ - 005	
ISOLATION VAI		00111210				00111		-		FST	С	CSJ - 005	
	•									ST-C	С	CSJ - 005	
*	,									PIT	2A		
2-CCR+460	2-5135D (C9)	ACTIVE	2	GLB	AO	A	3	0	С	FSE	Q		
EXCESS LETD		ANGER HE	13 CON			ING V	νάτε	R		FST	Q		
CONTAINMENT	ISOLATION VAL	VE	10 000					-1 \		ST-C	Q		
										LĴ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

	• • • • •		Code					Posi	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	. Size	Norm.	. Fail.	Test	Freq	Dev.	Comments
2-CCR-462	2-5135D (C9)	ACTIVE	2	GLB	AO	Α	3	0	C	FSE	Q		
		TO EXCESS	SIFTO		HEAT EXC	HAN	GERI	HE-13		FST	Q		
CONTAINMENT	ISOLATION VALV	/E		omn						ST-C	Q		
										LJ	OPB		
		•								PIT	2A		
2-CCW-101	2-5135B (B5)	ACTIVE	3	BTF	MAN	В	4	0		· FSE	2A		
CCW TO NUCL SHUTOFF VAL	EAR & POST-ACC	IDENT SAM	PLING	SAMPI	LE HEAT E	EXCH	IANG	ERS					
2-CCW-106	2-5135B (F5)	ACTIVE	3	BTF	MAN	В	4	0		FSE	2A		· · ·
NUCLEAR & PO HEADER SHUT	OST-ACCIDENT SA OFF VALVE	MPLE HEA	T EXCH	IANGE	RSCCW	RETL	JRN		,				
2-CCW-107	2-5135B (B4)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CCW TO RECI	PROCATING CHAF	rging Pum	P BEAF	RING O	IL COOLE	RS F	IE-66				,		
2-CCW-110	2-5135B (D4)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
RECIPROCATI	NG CHARGING PU VE	JMP PP-49 (OLERS	CCW RE	TURN	N HEA	DER					
2-CCW-120	2-5135C (D6)	ACTIVE	3	BTF	MAN	В	10	0		FSE	2A		
SOUTH BORIC	ACID EVAPORAT	OR CCW RI	eturn	HEAD	ER SHUTC	DFF \	/ALVI	Ξ`					
2-CCW-122	2-5135D (D5)	ACTIVE	2	CHK	SA	C	8	0		BDT-C	R		
CCW TO READ	TOR COOLANT P	UMPS CHE	CK VAL	VE						FS-O	Q		GL 96-06
2-CCW-135	2-5135D (D6)	ACTIVE	2	CHK	SA	AC	2.5	0		FS-C	R	ROJ - 017	Condition Monitoring Program
CCW TO READ	TOR SUPPORT C	OOLERS CI	HECK V	ALVE	•					LJ	R		
	•									FS-O	Q		GL 96-06
2-CCW-142	2-5135D (F9)	ACTIVE	2	CHK	SA	С	4	0		BDT-C	R		
CCW TO EXCE	SS LETDOWN HE	AT EXCHAN		IE-13 (HECK VA	LVE				FS-O	Q		GL 96-06



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
2-CCW-176E	2-5135 (G6)	ACTIVE	3	СНК	SA	С	16	0/C	FS-C	Q		
EAST COMPONE	NT COOLING W	ATER PUM	PP-10	E DISC	CHARGE (HEC	K VA	LVE	FS-O	Q		
2-CCW-176W	2-5135 (G7)	ACTIVE	3	CHK	SA	С	16	0/C	FS-C	Q		
WEST COMPON	ENT COOLING W	ATER PUM	P DISC	HARG	E CHECK	VALV	/E		FS-O	Q		
2-CCW-180E	2-5135A (L1)	ACTIVE	3	BTF	MAN	В	14	0	FSE	2A		
COMPONENT CO	OOLING WATER	TO EAST R	ESIDUA	L HEA	T REMOV	AL H	EAT					
2-CCW-180W	2-5135A (L6)	ACTIVE	3	BTF	MAN	В	14	0	FSE	2A		
COMPONENT CO	OOLING WATER	TO WEST F	RESIDU	AL HE/	AT REMO	/AL H	IEAT					
2-CCW-215	2-5135 (C1)	ACTIVE	3	CHK	SA	С	4	O/C	FS-C	C	CSJ - 034	Condition Monitoring Program
COMPONENT CO	OOLING WATER	SURGE TAI	NK TK-3	7 VAC	UUM BRE	AKE	R CHI	ECK	FS-O	С	CSJ - 034	
2-CCW-224-1	2-5135D (L4)	ACTIVE	3	CHK	SA	С	2	0	FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PI	JMP PP-45-	1 THER	MAL B	ARRIER (CHEC	K VA	LVE	BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-224-2	2-5135D (E4)	ACTIVE	3	CHK	SA	С	2	0	FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PL	UMP PP-45-	2 THER	MAL B	ARRIER (CHEC	K VA	LVE	BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-224-3	2-5135D (G4)	ACTIVE	3	CHK	SA	С	2	0	FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT P	UMP PP-45-	3 THER	RMAL E	ARRIER (CHEC	K VA	LVE	BDT-O	Q		BDT-O satisfied by normal system operation
*2-CCW-224-4	2-5135D (J4)	ACTIVE	3	CHK	SA	С	2	0	FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PI	UMP PP-45-	4 THEF	RMAL E	BARRIER	CHEC	K VA	LVE	BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-225-1	2-5135D (M4)	ACTIVE	3	CHK	SA	С	2	0	FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PI	UMP PP-45-	1 THEF	RMAL E	BARRIER	CHEC	K VA	LVE	BDT-O	Q		BDT-O satisfied by normal system operation



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm. Fai	il. Test	Freq	Dev.	Comments
2-CCW-225-2	2-5135D (E4)	ACTIVE	3	СНК	SA	С	2	0	FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PI	JMP PP-45-	2 THER	MAL B	ARRIER (CHEC	K VAL	VE	BDT-O	Q	i.	BDT-O satisfied by normal system operation
2-CCW-225-3	2-5135D (G4)	ACTIVE	3	СНК	SA	C	2	0	FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PI	JMP PP-45-	3 THER	MAL B	ARRIER (CHEC	K VAL	VE	BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-225-4	2-5135D (J4)	ACTIVE	3	СНК	SA	С	2	0	FS-C	R	ROJ - 030	Condition Monitoring Program
CCW TO REACT	OR COOLANT PI	UMP PP-45-	4 THER	MAL B	ARRIER (CHEC	K VAL	.VE	BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-243-25	2-5135E (B6)	ACTIVE	2	CHK	SA	AC	1	0	FS-C	R	ROJ - 002	Condition Monitoring Program
CCW TO CONTA		RATIONS C	PN-2 &	CPN-5	INNER CO)II S	LJ	R		
CHECK VALVE				0					BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-243-72	2-5135E (J6)	ACTIVE	2	CHK	SA	AC	1	0	FS-C	Ŕ	ROJ - 002	Condition Monitoring Program
CCW TO CONTA	INMENT PENET	RATIONS C	PN-3 &	CPN-4	INNER C	OOLII		DILS	LJ	R		
CHECK VALVE					· · · · · · · · · · · · · · · · · · ·				BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-244-25	2-5135E (B6)	ACTIVE	2	CHK	SA	AC	1	0	FS-C	R	ROJ - 002	Condition Monitoring Program
CCW TO CONTA	INMENT PENET	RATIONS C	PN-2 &	CPN-5	INNER CO	OOLII		DILS	IJ	R		
CHECK VALVE									BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-244-72	2-5135E (J6)	ACTIVE	2	CHK	SA	AC	1	0	FS-C	R	ROJ - 002	Condition Monitoring Program
CCW TO CONTA	INMENT PENET	RATIONS C	PN-3 &	CPN-4	INNER CO	OOLII	NG CC	MLS	IJ	R		
CHECK VALVE									BDT-O	Q		BDT-O satisfied by normal system operation
2-CCW-343	2-5135C (F9)	ACTIVE	3	GAT	MAN	В	2	0	FSE	2A		······································
2-DRA-300 SAM	PLE HEAT EXCH	ANGERS CO	CW RE	rurn h	HEADER	SHUT	OFF				. · ·	
2-CCW-348	2-5135C (H6)	ACTIVE	3	GAT	MAN	В	2	0	FSE	2A		<u> </u>
CCW TO RADIA VALVE	TION MONITOR [ORA-300 SA	MPLE H	IEAT E	XCHANG	ERS	SHUT	OFF				
2-CCW-404E	2-5135 (L4)	ACTIVE	3	GLB	MAN	В	1	0	FSE	2A		
EAST COMPONE	ENT COOLING W	ATER HEAT	T EXCH	ANGEF	R HE-15E	COM	PONE	NT				



Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-CCW-404W	2-5135 (L9)	ACTIVE	3	GLB	MAN	В	1	0		FSE	2A		
WEST COMPON	ENT COOLING W R OUTLET VENT	ATER HEA VALVE	T EXCH	IANGE	R HE-15W		/PON	ENT					
2-CCW-430E	2-5135 (C6)	ACTIVE	3	GAT	MAN	В	0.5	0		FSE	2A		
EAST CCW HEAT	T EXCHANGER (N HEADER SHU	OUTLET RAI	DIATIO	N ALAF	RM DETEC	TOR	CRS	4301					
2-CCW-430W	2-5135 (C7)	ACTIVE	3	GAT	MAN	В	0.5	0		FSE	2A	- 	
WEST CCW HEA CRS-4401 TO CO	T EXCHANGER	OUTLET RA	DIATIO	N ALA	RM DETE	CTOF	2						
2-CMO-410	2-5135 (L6)	ACTIVE	3	BTF	MO	В	16	O/C	AI	DIAG	6R		
EAST COMPONE	ENT COOLING W	ATER HEAT	EXCH	ANGEF	R HE-15E	СОМ	PONE	NT		FSE	18M		OMN-1
2-CMO-411	2-5135 (D6)	ACTIVE	3	BTF	MO	В	18	0	AI	DIAG	6R		
COMPONENT CO	DOLING WATER	PUMPS SU	CTION	CROS	STIE TRAI	N 'A' :	SHUT	OFF		FSE	18M		OMN-1
2-CMO-412	2-5135 (H6)	ACTIVE	3	BTF	MO	В	16	0	Al	DIAG	6R		· · · · · · · · · · · · · · · · · · ·
COMPONENT CO	DOLING WATER	PUMPS DIS	CHAR	GE CR	OSSTIE TI	RAIN	'A'			FSE	18M		OMN-1
2-CMO-413	2-5135 (D7)	ACTIVE	3	BTF	MO	В	18	0	Al	DIAG	9A		
COMPONENT CO	DOLING WATER	PUMPS SU	CTION	CROS	STIE TRAI	N 'B'	SHUT	OFF		FSE	18M		OMN-1
2-CMO-414	2-5135 (H7)	ACTIVE	3	BTF	MO	В	16	0	Al	DIAG	9A		
COMPONENT CO	DOLING WATER	PUMPS DIS	CHAR	GE CR	OSSTIE TI	RAIN	'B'			FSE	18M		OMN-1
2-CMO-415	2-5135 (M6)	ACTIVE	3	BTF	MO	В	16	0	AI	FSE	R	ROJ - 039	Verified by GL 89-10 (OMN-1) Program
COMPONENT CO	DOLING WATER	TO MISCEL	LANEC	US SE	RVICE TR	AIN '	Α'			DIAG	6R		
SHUTOFF VALV	E									FSE	18M		OMN-1
2-CMO-416	2-5135 (M7)	ACTIVE	3	BTF	MO	В	16	0	AI	FSE	R	ROJ - 039	Verified by GL 89-10 (OMN-1) Program
COMPONENT CO	OOLING WATER	TO MISCEL	LANEC	US SE	RVICE TR	RAIN '	B'			DIAG	6R		
SHUTOFF VALV	<u>E</u>									FSE	18M		OMN-1



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code		····			Posi	tion			Code			
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments	
2-CMO-419	2-5135A (L3)	ACTIVE	3	BTF	MO	В	14	С	AI	DIAG	54M				
EAST RESIDUA	L HEAT REMOVA	L HEAT EXC OFF VALVE	CHANGI E	ER HE	17E COM	PONE	ENT			FSE	18M		OMN-1		
2-CMO-420	2-5135 (M8)	ACTIVE	3	BTF	MO	В	16	0/C	AI	DIAG	9A				
WEST COMPON	NENT COOLING V	VATER HEA FOFF VALVE	T EXCH	IANGE	R COMPC)NEN	T.			FSE	18M		OMN-1	-	
2-CMO-429	2-5135A (L7)	ACTIVE	3	BTF	MO	В	14	С	AI	DIAG	54M				
WEST RESIDUA	AL HEAT REMOVA T SHUTOFF VALV	AL HEAT EX /E	CHANG	ER CO	MPONEN	п со	OLIN	G		FSE	18M		OMN-1		
2-CRV-410	2-5135 (B3)	ACTIVE	3	GLB	AO	В	1.5	0/C	С	FSE	Q				
DEMINERALIZE	D WATER TO CO	MPONENT	COOLIN	IG WA	TER SUR	GE T/		RAIN		FST	Q				
'A' SHUTOFF V/	ALVE									ST-C	Q				
										PIT	2A				
2-CRV-411	2-5135 (C3)	ACTIVE	3	GLB	AO	В	1.5	O/C	С	FSE	Q				
DEMINERALIZE	D WATER TO CO	MPONENT	COOLIN	IG WA	TER SUR	GE T/		RAIN		FST	Q				
'B' SHUTOFF V/	ALVE									ST-C	Q				
										PIT	2A				
2-CRV-412	2-5135 (E1)	ACTIVE	3	GLB	AO	В	4	0	С	FSE	Q				
COMPONENT C	OOLING WATER	SURGE TA	NK TK-:	37 VEN						FST	Q				
										ST-C	Q				
										PIT	2A				
2-CRV-445	2-5135B (L3)	ACTIVE	3	GLB	AO	В	6	0	С	FSE	Q				
SOUTH SPENT	FUEL PIT HEAT E	EXCHANGE	R 12-HE	-16S C	OMPONE	ENT C	OOL	NG		FST	Q				
WATER OUTLE	T SHUTOFF VAL	/E								ST-C	Q				
										ST-O	Q				
< <1.	·							_		PIT	2A				
2-CRV-470	2-5135C (M3)	ACTIVE	3	GLB	AO	В	6	0	С	FSE	Q				
LETDOWN HEA	T EXCHANGER H	IE-14 COMP	ONEN			ER O	UTLE	T		ST-C	Q				
CONTROL VAL	VE									FST	С	CSJ - 03	5		
										ST-C	С	CSJ - 03	3		

17



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-CRV-485	2-5135C (A6)	ACTIVE	3	BTF	AO	В	10	0	C	FSE	Q		
COMPONENT C		TO SOUTH	BORIC	ACID	EVAPORA	TOR				FST	Q		
12-HE-19-DS CC	ONTROL VALVE		201.00							ST-C	Q		
										PIT	2A	· /	
2-SV-122-1	2-5135E (A5)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A	GL	. 96-06
CONTAINMENT OUTLET SAFET	PENETRATIONS Y VALVE	CPN-2 & CF	PN-5 INI	NER C	OOLING C	OILS	CCV	V					
2-SV-122-2	2-5135E (H5)	ACTIVE	0	REL	SA	С	1.5	С		SVT	10A	GL	.96-06
CONTAINMENT OUTLET SAFET	PENETRATIONS Y VALVE	CPN-3 & CF	PN-4 INI	NER C	OOLING (OILS	CCV	V					
2-SV-122-23	2-5135D (E7)	ACTIVE	3	REL	SA	С	1	С		SVT	10A	GL	. 96-06
REACTOR SUP	PORT COOLERS	CCW RETU	RN HE/	ADER	SAFETY V	ALVE	<u>-</u>						
2-SV-122-3	2-5135E (H7)	ACTIVE	3	REL	SA	С	1.5	С		SVT	10A		······································
CCW TO CONT	AINMENT VENT F	AN HV-CEC	2-2 MOT	OR AI	R COOLE	R CC	W OL	JTLET			`		
2-SV-122-4	2-5135E (A6)	ACTIVE	3	REL	. SA	С	1.5	С		SVT	10A		
CONTAINMENT	VENT FAN HV-CI	EQ-1 MOTO	R AIR C	COOLE	R CCW O	UTLE	T SA	FETY					
2-SV-60	2-5135 (C1)	ACTIVE	3	REL	. SA	C	3	C		SVT	10A		
COMPONENT	OOLING WATER	SURGE TA	NK TK-3	37 SAF		/E							
2-SV-62-1	2-5135D (M3)	ACTIVE	3	REL	. SA	С	1	С		SVT	10A	GL	_ 96-06
, REACTOR COC	DLANŤ PUMP PP-4	15-1 THERM	IAL BAF	RIER		LET	SAFE	TY					
2-SV-62-2	2-5135D (F3)	ACTIVE	3	REL	. SA	С	1	C		SVT	10A	Gl	_ 96-06
REAOTOR COO		15-2 THERM	IAL BAF	RRIER		LET	SAFE	TY					



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CCW - Component Cooling Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-SV-62-3	2-5135D (H3)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		GL 96-06
REACTOR COOL	ANT PUMP PP-4	5-3 THERM	AL BAR	RIER	CCW OUT	LET S	SAFE	TY					,
2-SV-62-4	2-5135D (K3)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		GL 96-06
REACTOR COOL	ANT PUMP PP-4	5-4 THERM	AL BAR	RIER	CCW OUT	LET	SAFE	TY					
2-SV-63	2-5135D (D2)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		GL 96-06
REACTOR COOL HEADER SAFET	ANT PUMP MOT Y VALVE	ORS BEAR	ING OIL	COO	ERS CCV	V RET	rurn	Í					
2-SV-64	2-5135D (J8)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		GL 96-06
EXCESS LETDO	WN HEAT EXCH	ANGER HE-	13 CCV	VOUT	LET SAFT	EY V/	ALVE						
2-SV-65	2-5135C (N1)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		· · · · · · · · · · · · · · · · · · ·
LETDOWN HEAT	EXCHANGER H	E-14 CCW (OUTLE	r safe		=							
2-SV-68-15	2-5135C (G4)	ACTIVE	3	REL	SA	С		С		SVT	10A		
REACTOR COOL	ANT PUMP SEAL	L WATER H	EAT EX	CHAN	GER HE-1	1 CC	W						
2-SV-71	2-5135B (L1)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		
SOUTH SPENT F	FUEL PIT HEAT E	XCHANGE	R 12-HE	-165 (CW OUTI	LET S	SAFE	ΓY					
2-SV-72E	2-5135A (L2)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		Thermal Relief
EAST RESIDUAL	HEAT REMOVA	L HEAT EXC	CHANG	ER HE	-17E COM	PON	ENT						
*2-SV-72W	2-5135A (L7)	ACTIVE	3	REL	SA	C	1	С		SVT	10A		Thermal Relief
WEST RESIDUA WATER OUTLET	L HEAT REMOVA SAFETY VALVE	L HEAT EX	CHANG	ER CO	OMPONEN		OLIN	IG					· · · · · · · · · · · · · · · · · · ·


Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CRV - Control Room Ventilation

			Code					Posi	tion			Code	
Component	PiD(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-DW-163N	1-5149 (F2)	ACTIVE	3	GAT	MAN	В	2.5	0		FSE	2A		
CONTROL ROOM	AIR CONDITIO	NING CHILL	WATE	R TO N	IORTH LIC	QUID	CHILL	ER					
1-DW-163S	1-5149 (G2)	ACTIVE	3	GAT	MAN	B	2.5	0		FSE	2A	<u> </u>	
CONTROL ROOM	AIR CONDITIO	NING CHILL	WATE	R TO S	OUTH LIC	QUID	CHILL	ER					
1-DW-166N	1-5149 (E5)	ACTIVE	3	GAT	MAN	В	2.5	0		FSE	2A		
CONTROL ROOM PP-82N DISCHAR	AIR CONDITIO	NING NORT /ALVE	H CHILI	L WAT	ER CIRCL	JLATI	ON P	UMP					
1-DW-166S	1-5149 (J5)	ACTIVE	3	GAT	MAN	В	2.5	0		FSE	2A		· · · · · · · · · · · · · · · · · · ·
CONTROL ROOM PP-82S DISCHAR	AIR CONDITIO	NING SOUT /ALVE	H CHILI	L WAT	ER CIRCU	ILATI	ON PI	UMP					
1-VRV-315	1-5149 (F5)	ACTIVE	3	3W	AO	В	2.5	TH	0	FSE	Q		
CONTROL ROOM	VENTILATION	UNIT HV-AC	RA-1 C	HILL V	VATER INI	_ET/B	YPAS	SS		FST	Q		
VALVE										ST-O	Q		ST-O = "Full Divert"
1-VRV-325	1-5149 (G5)	ACTIVE	3	3W	AO	В	2.5	TH	0	FSE	Q		
CONTROL ROOM	VENTILATION	UNIT HV-AC	RA-2 C	HILL V	VATER INI	_ET/E	YPAS	SS		FST	Q		
VALVE										ST-O	Q		ST-O = "Full Divert"
2-DW-163N	2-5149 (G2)	ACTIVE	3	GAT	MAN	В	2.5	0		FSE	2A		· · · · · · · · · · · · · · · · · · ·
CONTROL ROOM SHUTOFF VALVE	AIR CONDITIO	NING CHILL	WATE	RTÓN		QID	CHILL	ER					· .
2-DW-163S	2-5149 (G2)	ACTIVE	3	GĀT	MAN	В	2.5	0		FSE	2A		
CONTROL ROOM		NING CHILL	WATE	R TO S	OUTH LIC	DIU	CHILL	ER					
2-DW-166N	2-5149 (D5)	ACTIVE	3	GAT	MAN	В	2.5	0		FSE	2A		
CONTROL ROOM PP-82N DISCHAR	AIR CONDITIO	NING NORT /ALVE	H CHILI	LWAT	ER CIRCL	ILATI	ON P	UMP					
2-DW-166S	2-5149 (J5)	ACTIVE	3	GAT	MAN	В	2.5	0		FSE	2A	···	······································
CONTROL ROOM PP-82S DISCHAR	AIR CONDITIO	NING SOUT		L WAT		ILATI		UMP					

1



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CRV - Control Room Ventilation

<u></u>			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-VRV-315	2-5149 (F5)	ACTIVE	3	3W	AO	В	2.5	TH	0	FSE	Q		
		UNIT HV-AC	RA-1 C	HILLV		FT/P		S		FST	Q		
VALVE										ST-O	Q		ST-O = "Full Divert"
2-VRV-325	2-5149 (G5)	ACTIVE	3	3W	AO	В	2.5	TH	0	FSE	Q		
		LINIT HV-AC	RA-2 C	нити		ET/E		35		FST	Q		
VALVE				111666	•/ \ : La \ \ i \ i					ST-O	Q		ST-O = "Full Divert"

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CTS - Containment Spray

	<u> </u>		Code			÷		Posit	ion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CTS-103E	1-5144 (H9)	ACTIVE	2	СНК	SA	С	10	С		BDT-C	R		
EAST CONTAINM	IENT SPRAY PU	MP PP-9E C	ISCHA	RGE C	HECK VA	LVE				FS-O	Q		
1-CTS-103W	1-5144 (L9)	ACTIVE	2	СНК	SA	С	10	С		BDT-C	R	······	· · · · · · · · · · · · · · · · · · ·
WEST CONTAIN	MENT SPRAY PL	JMP PP-9W	DISCH	ARGE	CHECK V	ALVE				FS-0	Q		
1-CTS-105E	1-5144 (J8)	PASSIVE	3	GAT	MAN	A	3	С		LT	R/2A		
EAST CONTAINM	IENT SPRAY PU	MP 1-PP-9E	DISCH	IARGE	TEST LIN	IE ISC	DLATI	ON					
1-CTS-105W	1-5144 (L8)	PASSIVE	3	GAT	MAN	A	3	С	_	LT	R/2A		
WEST CONTAIN	MENT SPRAY PL	JMP 1-PP-91	N DISC	HARG	e test li	NE IS	SOLA ⁻	ΓΙΟΝ					
1-CTS-106	1-5144 (F7)	PASSIVE	3	GAT	MAN	Α	3	С		LT	R/2A		
EAST & WEST CO	ONTAINMENT S /E	PRAY PUMF	PS DISC	HARG	E TO RW	ST TE	ST L	INE					
1-CTS-109	1-5144 (M6)	ACTIVE	2	CHK	SA	С	1	С		BDT-C	C		
CONTAINMENT S	SPRAY ADDITIV	E TANK TK-	36 VAC	UUM B	REAKER					FS-O	C	CSJ - 006	
1-CTS-110	1-5144 (M6)	ACTIVE	2	СНК	SA	С	1	С		BDT-C	С	· · · · · · · · · · · · · · · · · · ·	
CONTAINMENT	SPRAY ADDITIV	E TANK TK-	36 VAC	UUM В	REAKER					FS-O	С	CSJ - 006	
1-CTS-120E	1-5144 (H8)	ACTIVE	2	СНК	SA	AC	2	С		FS-C	Q		
CONTAINMENT S	SPRAY ADDITIV	E TANK TO	EAST C	ONTAI	NMENT S	PRA	PUN	ΛP		FS-O	Q		
SUCTION CHECK	< VALVE									LT	Q		
*1-CTS-120W	1-5144 (K8)	ACTIVE	2	CHK	SA	AC	2	С		FS-C	Q		
CONTAINMENT S	SPRAY ADDITIV	E TANK TO	WEST	CONTA		SPRA	Y PU	MP		FS-O	Q		
SUCTION CHECK	VALVE									LT	Q		
1-CTS-127E	1-5144 (E5)	ACTIVE	2	CHK	SA	AC	6	С		LT	R/2A		Water Seal Test
EAST CONTAINM	NENT SPRAY TO	LOWER CO	OMPAR	TMENT	RING HE		R			FS-C	R	ŔOJ - 032	Condition Monitoring Program
CONTAINMENT I	SOLATION CHE	CK VALVE		·····			<i>.</i>			FS-O	R	ROJ - 032	

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CTS - Containment Spray

		· .	Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	. Fail.	Test	Freq	Dev.	Comments
1-CTS-127W	1-5144 (E4)	ACTIVE	2	СНК	SA	AC	6	С		LT	R/2A		Water Seal Test
WEST CONTAI	NMENT SPRAY TO	D LOWER C			T RING HI		R			FS-C	R	ROJ - 032	Condition Monitoring Program
CONTAINMENT	FISOLATION CHE	CK VALVE						1 - A		FS-O	R	ROJ - 032	
1-CTS-131E	1-5144 (E2)	ACTIVE	2	CHK	SA	AC	8	С		LT	R/2A		Water Seal Test
EAST CONTAIN	MENT SPRAY TO	UPPER CO	MPART	MENT	RING HE	ADER	2			FS-C	R	ROJ - 032	Condition Monitoring Program
CONTAINMENT	FISOLATION CHE	CK VALVE					-			FS-O	R	ROJ - 032	
1-CTS-131W	1-5144 (E1)	ACTIVE	2	CHK	SA	AC	8	С		LT	R/2A		Water Seal Test
WEST CONTAI	NMENT SPRAY TO	O UPPER CO	MPAR	TMENT	RING HE	ADE	R	•		FS-C	R	ROJ - 032	Condition Monitoring Program
CONTAINMENT	ISOLATION CHE	CK VALVE								FS-O	R	ROJ - 032	
1-CTS-138E	1-5144 (G9)	ACTIVE	2	CHK	SA	С	12	С	·	FS-C	R	ROJ - 031	Condition Monitoring Program
REFUELING W	ATER STORAGE	ΤΑΝΚ ΤΟ ΕΑ	ST CO		MENT SPE		UMP			FS-O	R	ROJ - 031	
PP-9E SUCTIO	N CHECK VALVE						•	•		PS-O	Q		Partial Stroke only if valve is disassembled
1-CTS-138W	1-5144 (J9)	ACTIVE	2	CHK	SA	С	12	С		FS-C	R	ROJ - 031	Condition Monitoring Program
REFUELING W	ATER STORAGE		EST CO	NTAIN	MENT SP	RAY	PUMF	. .		FS-O	R	ROJ - 031	
PP-9W SUCTIO	ON CHECK VALVE									PS-O	Q		Partial Stroke only if valve is disassembled
1-IMO-202	1-5144 (M6)	ACTIVE	2	GAT	MO	В	2.5	С	Al	DIAG	9A		
CONTAINMENT	T SPRAY ADDITIV	E TANK TK-	B6 OUT	LET TR	RAIN 'A' SH	IUTO	FF V	ALVE		FSE	18M		OMN-1
1-IMO-204	1-5144 (M7)	ACTIVE	2	GAT	MO	В	2.5	С	AI	DIAG	9A		· · · · · · · · · · · · · · · · · · ·
CONTAINMENT	T SPRAY ADDITIV	E TANK TK-:	36 OUT	LET TR	RAIN 'B' SH	IUTO	FF V	ALVE		FSE	18M		OMN-1
1-IMO-210	1-5144 (H8)	ACTIVE	2	GAT	МО	В	10	С	AI	DIAG	9A		
EAST CONTAIN	NMENT SPRAY PU	JMP PP-9E [ISCHA	RGE S	HUTOFF	VALV	E			FSE	18M		OMN-1
1-IMO-211	1-5144 (H8)	ACTIVE	2	GAT	МО	В	10	С	Al	DIAG	9A		
EAST CONTAIN	NMENT SPRAY PU	JMP PP-9E D	DISCHA	RGE S	HUTOFF	VALV	E			FSE	18M		OMN-1
1-IMO-212	1-5144 (H8)	ACTIVE	2	GAT	MO	В	2	0	AI	DIAG	9A		
EAST CONTAIN	NMENT SPRAY PU	JMP PP-9E C VALVE	DISCHA	RGE T	O CONTA	INME	NT S	PRAY		FSE	18M		OMN-1
Revision 4								· · · · · · · · · · · · · · · · · · ·					~



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CTS - Containment Spray

							_						
			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Type	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev	Comments
1-IMO-215	1-5144 (F9)	ACTIVE	2	GAT	MO	В	12	0	AI	DIAG	54M		
REFUELING W/ PP-9E SUCTION	ATER STORAGE T	TANK TO EA 'E	ST CO	NTAIN	MENT SPR	RAY P	UMP			FSE	18M		OMN-1
1-IMO-220	1-5144 (L8)	ACTIVE	2	GAT	MO	В	10	С	Al	DIAG	6A		······································
WEST CONTAIN	NMENT SPRAY PI	JMP DISCH	ARGE S	HUTO	FF VALVE					FSE	18M		OMN-1
1-IMO-221	1-5144 (L8)	ACTIVE	2	GAT	MO	В	10	С	AI	DIAG	9A		······
WEST CONTAIN	NMENT SPRAY P	JMP DISCH	ARGE S	HUTO	FF VALVE					FSE	18M		OMN-1
1-IMO-222	1-5144 (L9)	ACTIVE	2	GAT	MO	В	2	0	AI	DIAG	9A	·····	
WEST CONTAIL	NMENT SPRAY P	JMP DISCH/ /ALVE	ARGE T	0 001	NTAINMEN	IT SP	RAY			FSE	18M		OMN-1
1-IMO-225	1-5144 (J9)	ACTIVE	2	GAT	MO	В	12	0	Al	DIAG	54M		
REFUELING WA	ATER STORAGE	TANK TO WI VE	EST CO	NTAIN	IMENT SP	RAY	PUM	0		FSE	18M		OMN-1
1-RH-141	1-5144 (E3)	ACTIVE	2	CHK	SA	AC	8	С	⁰⁰⁻¹	LT	R/2A		Water Seal Test
EAST RHR TO	UPPER CONTAIN	MENT SPRA	Y RING	HEAD	DER CONT		IENT			FS-C	R	ROJ - 032	Condition Monitoring Program
ISOLATION CH	ECK VALVE									FS-O	R	ROJ - 032	
1-RH-142	1-5144 (E3)	ACTIVE	2	CHK	SA	AC	8	C		LT	R/2A		Water Seal Test
WEST RHR TO	UPPER CONTAIN	MENT SPR	AY RING	3 HEAI	DER CON	TAIN	IENT	-		FS-C	R	ROJ - 032	Condition Monitoring Program
ISOLATION CH	ECK VALVE									FS-O	R	ROJ - 032	
1-SV-107	1-5144 (M5)	ACTIVE	2	REL	SA	С	1	С		SVT	10A		
CONTAINMENT	SPRAY ADDITIV	E TANK TK-:	36 SAFI	ETY VA	LVE								
2-CTS-103E	2-5144 (H9)	ACTIVE	2	СНК	SA	С	10	С	······································	BDT-C	R		
EAST CONTAIN	IMENT SPRAY PL	IMP PP-9E (DISCHA	RGE C	HECK VA	LVE				FS-O	Q		
2-CTS-103W	2-5144 (L9)	ACTIVE	2	СНК	SA	С	10	С		BDT-C	R		
WEST CONTAI	NMENT SPRAY P	UMP PP-9W	DISCH	ARGE	CHECK V	ALVE				FS-O	Q		

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CTS - Containment Spray

ti			Code				_	Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-CTS-105E	2-5144 (J8)	PASSIVE	3	GAT	MAN	Α	3	С		LT	R/2A		
EAST CONTAINM	IENT SPRAY PU	IMP 2-PP-9E	DISCH	ARGE	TEST LIN	e ISC	ILATI	ON					
2-CTS-105W	2-5144 (L8)	PASSIVE	3	GAT	MAN	Α	3	С		LT	R/2A		
WEST CONTAIN	MENT SPRAY PI	UMP 2-PP-9\	N DISC	HARG	e test li	NE IS	OLA	rion					
2-CTS-106	2-5144 (F7)	PASSIVE	3	GAT	MAN	Α	3	C		LT	R/2A	······································	
EAST & WEST C	ONTAINMENT S /E	PRAY PUMF	PS DISC	HARG	E TO RW	ST TE	STL	INE					
2-CTS-109	2-5144 (M6)	ACTIVE	2	CHK	SA	С	1	С		BDT-C	С		
CONTAINMENT	SPRAY ADDITIV	E TANK TK-3	B6 VACI	JUM B	REAKER					FS-O	С	CSJ - 006	
2-CTS-110	2-5144 (M6)	ACTIVE	2	CHK	SA	С	1	С		BDT-C	С		
CONTAINMENT	SPRAY ADDITIV	E TANK TK-	B6 VACI	JUM B	REAKER					FS-O	С	CSJ - 006	
2-CTS-120E	2-5144 (G8)	ACTIVE	2	CHK	SA	A/C	2	С		FS-C	Q		
CONTAINMENT			FAST C	ONTAI	NMENT S	PRAY		(P		FS-O	Q		
SUCTION CHECK	VALVE									LT	Q	_	
2-CTS-120W	2-5144 (K8)	ACTIVE	2	CHK	SA	A/C	2	С		FS-C	Q		
CONTAINMENT	SPRAY ADDITIV	E TANK TO	WEST C	ONTA	INMENT S	SPRA	Y PU	MP		FS-O	Q		
SUCTION CHEC	K VALVE									LT	Q		
2-CTS-127E	2-5144 (E4)	ACTIVE	2	CHK	SA	AC	6	C		LT	R/2A		Water seal test
EAST CONTAIN	MENT SPRAY TO	DLOWER CO	MPAR [®]	IMEN	RING HE		R			FS-C	R	ROJ - 032	Condition Monitoring Program
CONTAINMENT	SOLATION CHE	CK VALVE								FS-O	R	ROJ - 032	
2-CTS-127W	2-5144 (E4)	ACTIVE	2	CHK	SA	AC	6	C		LT	R/2A		Water seal test
WEST CONTAIN	MENT SPRAY TO	O LOWER C	OMPAR	TMEN	T RING H	EADE	R			FS-C	R	ROJ - 032	Condition Monitoring Program
CONTAINMENT	SOLATION CHE	CK VALVE								FS-O	R	ROJ - 032	
2-CTS-131E	2-5144 (E2)	ACTIVE	2	CHK	SA	AC	8	С		LT	R/2A		Water seal test
EAST CONTAIN	MENT SPRAY TO	UPPER CO	MPART	MENT	RING HE	ADEF	ł			FS-C	R	ROJ - 032	Condition Monitoring Program
CONTAINMENT	SOLATION CHE	CK VALVE								FS-O	R	ROJ - 032	



Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CTS - Containment Spray

			Code					Posi	tion			Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-CTS-131W	2-5144 (E1)	ACTIVE	2	СНК	SA	AC	8	С		LT	R/2A		Water seal test
WEST CONTAIN	MENT SPRAY TO	UPPER CO		MENT	RING HE		2			FS-C	R	ROJ - 032	Condition Monitoring Program
CONTAINMENT I	SOLATION CHEC	K VALVE					•			FS-O	R	ROJ - 032	
2-CTS-138E	2-5144 (F9)	ACTIVE	2	СНК	SA	С	12	С		FS-C	R	ROJ - 031	Condition Monitoring Program
REFUELING WA	TER STORAGE T	ANK TO EA	ST CO		MENT SPF	RAY F	UMP			FS-O	R	ROJ - 031	
PP-9E SUCTION	CHECK VALVE									PS-O	Q		Partial Stroke only if valve is disassembled
2-CTS-138W	2-5144 (J9)	ACTIVE	2	CHK	SA	С	12	С		FS-C	R	ROJ - 031	Condition Monitoring Program
REFUELING WA	TER STORAGE T	ANK TO WI	EST CO	NTAIN	MENT SP	RAY	PUMF	,		FS-O	R	ROJ - 031	
PP-9W SUCTION	CHECK VALVE									PS-O	Q		Partial Stroke only if valve is disassembled
2-IMO-202	2-5144 (M6)	ACTIVE	2	GAT	MO	В	2.5	С	AI	DIAG	9A		
CONTAINMENT	SPRAY ADDITIVE	TANK TK-3	B6 OUTI	ET TR	ain 'a' sf	IUTO	FF V/	ALVE		FSE	18M		OMN-1
2-IMO-204	2-5144 (M7)	ACTIVE	2	GAT	MO	В	2.5	С	Al	DIAG	9A	<u> </u>	
CONTAINMENT	SPRAY ADDITIVE	TANK TK-	B6 OUT	ET TR	RAIN 'B' SH	IUTO	FF V	ALVE		FSE	18M		OMN-1
2-IMO-210	2-5144 (H8)	ACTIVE	2	GAT	MO	В	10	С	AI	DIAG	9A		
EAST CONTAIN	IENT SPRAY PU	MP PP-9E C	ISCHA	RGE S	HUTOFF	VALV	E			FSE	18M		OMN-1
2-IMO-211	2-5144 (H8)	ACTIVE	2	GAT	MO	В	10	C	AI	DIAG	9A		
EAST CONTAIN	IENT SPRAY PU	MP PP-9E C	DISCHA	RGE S	HUTOFF	VALV	E			FSE	18M		OMN-1
2-IMO-212	2-5144 (H8)	ACTIVE	2	GAT	MO	В	2	0	AI	DIAG	9A		
EAST CONTAIN	IENT SPRAY PU	MP PP-9E [ALVE	DISCHA	RGET	O CONTA	INME	NT S	PRAY		FSE	18M		OMN-1
2-IMO-215	2-5144 (F9)	ACTIVE	2	GAT	MO	В	12	0	AI	DIAG	54M		
REFUELING WA	TER STORAGE T	ANK TO EA	ST CO	NTAIN	MENT SPF	RAY F	PUMP	•		FSE	18M		OMN-1
2-IMO-220	2-5144 (M8)	ACTIVE	2	GAT	MO	В	10	C	Al	DIAG	9A		
WEST CONTAIN	MENT SPRAY PL	JMP PP-9W	DISCH	ARGE	SHUTOF		VE			FSE	18M		OMN-1



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CTS - Containment Spray

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-IMO-221	2-5144 (L8)	ACTIVE	2	GAT	МО	В	10	C	Al	DIAG	9A		
WEST CONTAIN	MENT SPRAY P	JMP PP-9W	DISCH	ARGE	SHUTOFF		VE			FSE	18M		OMN-1
2-IMO-222	2-5144 (L9)	ACTIVE	2	GAT	MO	В	2	0	Al	DIAG	9A	·	<u></u>
WEST CONTAIN	MENT SPRAY PI	JMP PP-9W UTOFF VAL\	DISCH. /E	ARGE	TOCONT	AINM	ENT			FSE	18M		OMN-1
2-IMO-225	2-5144 (J9)	ACTIVE	2	GAT	MO	В	12	0	AI	DIAG	54M		·····
REFUELING WA	ATER STORAGE	TANK TO WI VE	EST CO	NTAIN	MENT SP	RAYI	PUMF	•		FSE	18M		OMN-1
2-RH-141	2-5144 (E3)	ACTIVE	2	CHK	SA	AC	8	С		LT	R/2A		Water seal test
EAST RHR TO U	JPPER CONTAIN	MENT SPRA	Y RING	HEAD	ER CONT		IENT			FS-C	R	ROJ - 032	Condition Monitoring Program
ISOLATION CHE	ECK VALVE									FS-O	R	ROJ - 032	
2-RH-142	2-5144 (E3)	ACTIVE	2	CHK	SA	AC	8	С		LT	R/2A		Water seal test
WEST RHR TO	UPPER CONTAIN	MENT SPR	AY RING	G HEAI		TAIN	MENT	•		FS-C	R	ROJ - 032	Condition Monitoring Program
ISOLATION CHE	ECK VALVE									FS-O	R	ROJ - 032	
2-SV-107	2-5144 (M5)	ACTIVE	2	REL	SA	C	1	С		SVT	10A		
CONTAINMENT	SPRAY ADDITIV	E TANK TK-	36 SAFI		ALVE								

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CV - Containment Ventilation

			Code					Posi	tion			Code	
Component	PiD(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-SM-10	1-5147A (A4)	PASSIVE	2	GAT	MAN	Α	0.5	С		LJ	OPB		
CONTAINMENT VALVE	UPPER VOLUME	AIR SAMPL	E ESX-	4 CON	ITAINMEN	TISC)LATI	ON					
1-SM-4	1-5147A (A2)	PASSIVE	2	GAT	MAN	Α	0.5	С		LJ	OPB		
CONTAINMENT ISOLATION VAL	INSTRUMENTAT	ION ROOM	AIR SAI	MPLE	ESX-2 CO	NTAI	MEN	IT					
1-SM-6	1-5147A (A2)	PASSIVE	2	GAT	MAN	Α	0.5	C		LJ	OPB		
CONTAINMENT ISOLATION VAL	INSTRUMENTAT	ION ROOM	AIR SAI	MPLE	ESX-2 CO	NTAI	NMEN	IT					
1-SM-8	1-5147A (A4)	PASSIVE	2	GAT	MAN	Α	0.5	С		LJ	OPB		
CONTAINMENT VALVE	UPPER VOLUME	AIR SAMPL	E ESX-	4 CON	ITAINMEN	TISC	DLATI	ON					
1-VCR-101	1-5147A (J8)	ACTIVE	2	BTF	AO	A	14	O/C	С	FSE	Q		
CONTAINMENT	INSTRUMENTAT	ION ROOM	PURGE	SUPP	LY TRAIN	'A'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
					1 .					LJ	OPB		·
										PIT	2A		
1-VCR-102	1-5147A (J9)	ACTIVE	2	BTF	AO	Α	14	O/C	С	FSE	Q		
CONTAINMENT	INSTRUMENTAT	ION ROOM	PURGE	EXHA	UST TRAI	N 'A'				FST	Q		
CONTAINMENT	ISOLATION VALV	V E								ST-C	Q		
										LJ	OPB		
	·····									PIT	2A		
1-VCR-103	1-5147A (J5)	ACTIVE	2	BTF	AO	Α	24	O/C	С	FSE	Q		
CONTAINMENT	LOWER COMPA	RTMENT PL	JRGE S	UPPLY	TRAIN 'A	•				FST	Q		
CONTAINMENT	ISOLATION VALV	/E								ST-C	Q		
$\sim q_{\rm c}$										LJ	OPB		
4										PIT	2A		

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CV - Containment Ventilation

	· · ·		Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-VCR-104	1-5147A (J5)	ACTIVE	2	BTF	AO	Α	30	0/C	С	FSE	Q		
CONTAINMENT				XHAUS	T TRAIN '	Δ'				FST	Q		
CONTAINMENT	ISO VALVE VCR-	104 ACTUA	TOR							ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-VCR-105	1-5147A (J3)	ACTIVE	2	BTF	AO	Α	30	O/C	С	FSE	Q		
CONTAINMENT			RGE SL	JPPLY	TRAIN 'A'	CON	TAIN	MENT		FST	Q		
ISOLATION VA	LVE									ST-C	Q		
		•								IJ	OPB		
										PIT	2A		
1-VCR-106	1-5147A (J3)	ACTIVE	2	BTF	AO	Α	24	O/C	С	FSE	Q		
CONTAINMENT	UPPER COMPAR		RGE EX	(HAUS	T TRAIN '	4'				FST	Q		
CONTAINMENT	SOLATION VAL	/E				•				ST-C	Q		
										LJ	OPB		
										PIT	2A .		
1-VCR-107	1-5147A (J4)	ACTIVE	2	BTF	AO	A	14	O/C	С	FSE	Q		
CONTAINMEN	PRESSURE REL	IEF TRAIN '		TAINM	ENT ISOL			VE		FST	Q		
										ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-VCR-201	1-5147A (J8)	ACTIVE	2	BTF	AO	A	14	O/C	С	FSE	Q		
CONTAINMEN	FINSTRUMENTAT	ION ROOM	PURGE		LY TRAIN	'B'				FST	Q		
CONTAINMEN	FISOLATION VALV	VE				_				ST-C	Q		
•	•									LJ	OPB		
<u></u>										PIT	2A		
1-VCR+202	1-5147A (J9)	ACTIVE	2	BTF	AO	Α	14	0/C	С	FSE	Q		
CONTAINMEN	INSTRUMENTAT	ION ROOM	PURGE	EXHA	UST TRAI	N 'B'				FST	Q		
CONTAINMEN	FISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CV - Containment Ventilation

			Code			_		Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-VCR-203	1-5147A (J5)	ACTIVE	2	BTF	AO	Α	24	O/C	С	FSE	Q		
CONTAINMENT	LOWER COMPA	RTMENT PU	IRGE S	UPPLY	TRAIN 'B'	r				FST	Q		
CONTAINMENT	ISOLATION VALV	/E								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-VCR-204	1-5147A (J5)	ACTIVE	2	BTF	AO	Α	30	O/C	С	FSE	Q		
CONTAINMENT	LOWER COMPA	RTMENT PU	JRGE E	XHAUS	ST TRAIN '	B'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E				-				ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-VCR-205	1-5147A (J3)	ACTIVE	2	BTF	AO	Α	30	O/C	С	FSE	Q		
CONTAINMENT			RGE SI	JPPLY	TRAIN 'B'	CON	TAIN	MENT		FST	Q		
ISOLATION VA	LVE	· · · · · · · · · · · · · · · · · · ·				••••				ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-VCR-206	1-5147A (J3)	ACTIVE	2	BTF	AO	Α	24	O/C	С	FSE	Q		i i i i i i i i i i i i i i i i i i i
CONTAINMEN	UPPER COMPAR		RGE E)	HAUS	T TRAIN '	3'				FST	Q		
CONTAINMENT	ISOLATION VALV	/E								ST-C	Q		
										ĹĴ	OPB		
										PIT	2A		
1-VCR-207	1-5147A (J4)	ACTIVE	2	BTF	AO	Α	14	O/C	С	FSE	Q		and the fitter of the second
CONTAINMEN	PRESSURE REL	IEF TRAIN 'I	B' CON	FAINM	ENT ISOLA			VE		FST	Q		
										ST-C	Q		
•	•									LJ	OPB		
•·	·									PIT	2A		
2-SM-10	2-5147A (A4)	PASSIVE	2	GAT	MAN	Α	0.5	C		LJ	OPB		
	UPPER VOLUME	AIR SAMPL	LE ESX	4 CON	TAINMEN	T ISC	OLATI	ON		·			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CV - Containment Ventilation

· · · ·		· ·	Code					Posi	tion			Code	
Component	PiD(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-SM-4	2-5147A (A2)	PASSIVE	2	GAT	MAN	Α	0.5	С		LJ	OPB		
CONTAINMENT ISOLATION VAL	INSTRUMENTAT VE	ION ROOM	AIR SAI	MPLE I	ESX-2 CO	NTAIN	MEN	т					
2-SM-6	2-5147A (A2)	PASSIVE	2	GAT	MAN	Α	0.5	С		LJ	OPB	· · · · · · · · · · · · · · · · · · ·	 · · · · · · · · · · · · · · · · · · ·
CONTAINMENT ISOLATION VAL	INSTRUMENTAT VE	ION ROOM	AIR SAI	MPLE I	ESX-2 CO	NTAI	MEN	т					
2-SM-8	2-5147A (A4)	PASSIVE	2	GAT	MAN	A	0.5	С		LJ	OPB		
CONTAINMENT	UPPER VOLUME	AIR SAMPL	E ESX-	4 CON	TAINMEN	TISC	LATIO	N					
2-VCR-101	2-5147A (J8)	ACTIVE	2	BTF	AO	Α	14	O/C	С	FSE	Q		 · · · · ·
CONTAINMENT	INSTRUMENTAT	ION ROOM	PURGE	SUPP	LY TRAIN	'A'				FST	Q		
CONTAINMENT	ISOLATION VALV	VE								ST-C	Q		
										LJ	OPB		
		<u> </u>								PIT	2A		
2-VCR-102	2-5147A (J9)	ACTIVE	2	BTF	AO	Α	14	0/C	С	FSE	Q		
CONTAINMENT	INSTRUMENTAT	ION ROOM	PURGE	EXHA	UST TRAI	N 'A'				FST	Q		· · · ·
CONTAINMENT	ISOLATION VAL	√E								ST-C	Q		
·										LJ	OPB		
										PIT	2A		
2-VCR-103	2-5147A (J5)	ACTIVE	2	BTF	AO	Α	24	O/C	С	FSE	Q		 - ,
CONTAINMENT	LOWER COMPA	RTMENT PU		UPPLY	' TRAIN 'A	•				FST	Q		
CONTAINMENT	ISOLATION VALV	VE								ST-C	Q		
										LJ	OPB		
•	•									PIT	2A		
2-VCR-104	2-5147A (J5)	ACTIVE	2	BTF	AO	Α	30	0/C	С	FSE	Q		
CONTAINMENT	LOWER COMPA	RTMENT PU	RGE E	XHAUS	ST TRAIN	'A'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE				••.				ST-C	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CV - Containment Ventilation

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-VCR-105	2-5147A (J3)	ACTIVE	2	BTF	AO	A	30	O/C	С	FSE	Q		·
CONTAINMENT			RGE SI		TRAIN 'A'	CON		MENT		FSŤ	Q		
ISOLATION VA	LVE					0011		*****		ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-VCR-106	2-5147A (J3)	ACTIVE	2	BTF	AO	A	24	0/C	С	FSE	Q		
CONTAINMEN	T UPPER COMPAR		RGE EX	HAUS	T TRAIN '	Δ'				FST	Q		
CONTAINMEN	T ISOLATION VAL	VE				•				ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-VCR-107	2-5147A (J4)	ACTIVE	2	BTF	AO	A	14	O/C	С	FSE	Q		
CONTAINMEN	T PRESSURE REL	IFF TRAIN '			INT ISOL			VF		FST	Q		
										ST-C	Q		
										IJ	OPB		
										PIT	2A		
2-VCR-201	2-5147A (J8)	ACTIVE	2	BTF	AO	Α	14	0/C	С	FSE	Q		
CONTAINMEN	T INSTRUMENTAT	ION ROOM	PURGE	SUPP	LY TRAIN	'B'				FST	Q		
CONTAINMEN	T ISOLATION VAL	VE				-				ST-C	Q		
		•								LJ	OPB		
										PIT	2A		
2-VCR-202	2-5147A (J9)	ACTIVE	2	BTF	AO	A	14	O/C	С	FSE	Q		
CONTAINMEN	T INSTRUMENTAT		PURGE	EXHA	UST TRA	IN 'B'				FST	Q		
CONTAINMEN	T ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
	·									PIT	2A		
2-VCR+203	2-5147A (J5)	ACTIVE	2	BTF	AO	A	24	O/C	С	FSE	Q		
CONTAINMEN	T LOWER COMPA	RTMENT PL	JRGE S	UPPLY	' TRAIN 'B					FST	Q		
CONTAINMEN	T ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
Revision 4					-								E



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CV - Containment Ventilation

			Code					Posit	ion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-VCR-204	2-5147A (J5)	ACTIVE	2	BTF	AO	Α	30	O/C	С	FSE	Q		
CONTAINMENT				CHAUS		'R'				FST	Q		
CONTAINMEN	ISOLATION VAL	/E								ST-C	Q		
										LJ	OPB		
				•						ΡΙΤ	2A		
2-VCR-205	2-5147A (J3)	ACTIVE	2	BTF	AO	Α	30	O/C	С	FSE	Q		i i i i i i i i i i i i i i i i i i i
CONTAINMENT			RGE SU	IPPI Y	TRAIN 'B'	CON	TAINN	IENT		FST	Q		
ISOLATION VA	LVE					0011				ST-C	Q		
										IJ	OPB		
										PIT	2A		
2-VCR-206	2-5147A (J3)	ACTIVE	2	BTF	AO	Α	24	O/C	С	FSE	Q	·····	· · · · · · · · · · · · · · · · · · ·
CONTAINMEN			RGE EX	HAUS	T TRAIN '	R'				FST	Q		
CONTAINMEN		/E								ST-C	Q		
										LJ	OPB		
		•								PIT	2A		
2-VCR-207	2-5147A (J4)	ACTIVE	2	BTF	AO	Α	14	O/C	С	FSE	Q		
CONTAINMEN				ΓΔΙΝΙΜΙ				VE		FST	Q		
OOMINAMEN										ST-C	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posit	ion			Code	· · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
12-QRV-420	12-5131 (G5)	ACTIVE	3	GLB	AO	В	2	C/TH	С	FSE	Q		
	ACID STORAGE	TANK TK-12								FSE	Q		
							~``````````````````````````````````````			FST	Q		
										FST	Q		
										ST-C	Q		
										ST-C	Q		
1-CS-292	1-5129 (H6)	ACTIVE	2	CHK	SA	С	2	С	,	FS-C	R	ROJ - 003	Condition Monitoring Program
EMERGENCY B	SORATION TO CV	CS CHARGI		IPS SL	JCTION H	EADE	RCH	IECK		FS-O	R	ROJ - 003	
VALVE										FS-O	С	ROJ - 003	
1-CS-295	1-5129 (G6)	ACTIVE	2	CHK	SA	С	4	0		FS-C	R	ROJ - 025	Condition Monitoring Program
VOLUME CONT VALVE	ROL TANK TO CV	CS CHARG	ING PU	MPS S	UCTION H	IEAD	ER C	HECK		FS-O	Q		
1-CS-297E	1-5129 (H7)	ACTIVE	2	CHK	SA	С	2	0/C		BDT-C	R	· · · · · · · · · · · · · · · · · · ·	
EAST CENTRIF	UGAL CHARGING	PUMP MIN VE	I-FLOW	TOR	CP SEAL \	NATE	er he	AT		FS-O	Q	·	
1-CS-297W	1-5129 (F7)	ACTIVE	2	CHK	SA	C	2	O/C		BDT-C	R	· · · · · · · · · · · · · · · · · · ·	
WEST CENTRI	FUGAL CHARGING	G PUMP MIN VE	II-FLOV	V TO R	CP SEAL	WAT	er Hi	EAT		FS-0	Q		
1-CS-299E	1-5129 (H7)	ACTIVE	2	CHK	SA	AC	4	O/C		LT	R/2A		-
FAST CENTRIE	UGAL CHARGING		50F DIS	CHAR	GE CHEC		VF			FS-C	R	ROJ - 004	
					02 01120					FS-O	R	ROJ - 004	
1-CS-299W	1-5129 (F7)	ACTIVE	2	CHK	SA	AC	4	O/C		LT	R/2A		
WEST CENTRI	FUGAL CHARGIN	G PUMP PP	50W D	ISCHA	RGE CHE	CK V			-	FS-C	R	ROJ - 004	
	•					••••				FS-O	R	ROJ - 004	
1-CS-319	1-5129 (H3)	ACTIVE	2	GLB	MAN	В	3	C		FSE	2A	CSJ - 030	
1-QŔV-200 BYF	PASS SHUTOFF V	ALVE		•									
1-CS-321	1-5129 (E3)	ACTIVE	2	CHK	SA	AC	3	0		FS-C	R	ROJ - 005	Condition Monitoring Program
CVCS CHARGE	NG TO REACTOR	COOLANT	SYSTEM			TISO	1 ATIO	אר		LJ	R		
CHECK VALVE					••••	. 100				FS-O	Q		
Revision 4					<u>-</u>								1



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail	l. Test	Freq	Dev.	Comments
1-CS-325	5129 (B3)	ACTIVE	1	СНК	SA	С	2	C/O	FS-C	R	ROJ - 020	Condition Monitoring Program
CVCS CHARGIN	IG TO PRESSUR	ZER AUXILI	ARY SF	RAY C	HECK VA	IVF			FS-O	R	ROJ - 020	
0.000									PS-O	R	ROJ - 020	Partial Stroke only if valve is disassembled
1-CS-328-L1	1-5129 (B2)	ACTIVE	1	CHK	SA	С	3	O/C	FS-C	R	ROJ - 037	Condition Monitoring Program
CVCS ALTERNA	ATE CHARGING T	O REACTO	R COOL	ANT L	OOP #1 C	OLD	LEG		FS-O	R	ROJ - 037	
CHECK VALVE									FS-O	Q		
1-CS-328-L4	1-5129 (B3)	AÇTIVE	1	CHK	SA	С	3	O/C	FS-C	R	ROJ - 037	Condition Monitoring Program
CVCS NORMAL	CHARGING TO F	REACTOR C		TIOO	P #4 COL		S CHE	-CK	FS-O	R	ROJ - 037	
VALVE				. 200					FS-O	Q		
1-CS-329-L1	1-5129 (B2)	ACTIVE	1	CHK	SA	С	3	O/C	FS-C	R	ROJ - 037	Condition Monitoring Program
CVCS ALTERNA	ATE CHARGING T	O REACTO	R COOI	ANTI	OOP #1 C		IFG		FS-O	R	ROJ - 037	
CHECK VALVE									FS-O	Q		
1-CS-329-L4	1-5129 (B3)	ACTIVE	1	CHK	SA	С	3	O/C	FS-C	R	ROJ - 037	Condition Monitoring Program
CVCS NORMAL	CHARGING TO F	REACTOR C		TIOO	P #4 COLI		G CHE	ECK	FS-O	R	ROJ - 037	
VALVE									FS-O	Q		
1-CS-415-1	12-5131 (F4)	ACTIVE	3	CHK	SA	С	2	O/C	FS-C	Q		· · · · · · · · · · · · · · · · · · ·
BORIC ACID ST	ORAGE TANKS 1	RANSFER	PUMP P	P-46-1	DISCHAF	RGE	CHEC	к	FS-O	Q		
1-CS-415-2	12-5131 (F2)	ACTIVE	3	CHK	SA	С	2	O/C	FS-C	Q	· · · · ·	
BORIC ACID ST	ORAGE TANKS T	RANSFER I	PUMP P	P-46-2	DISCHAF	RGE (CHEC	ĸ	FS-O	Q		
1-CS-426N	12-5131 (M2)	ACTIVE	. 3	CHK	SA	С	1	O/C	BDT-C	R		
NORTH BORIC	ACID FILTER QC	-12 TO CVC /ALVE	S CHAR	GING	PUMPS A	ND N	ORTH	4	FS-O	Q		
1-CS-427N	12-5131 (L3)	ACTIVE	3	CHK	SA	С	2	O/C	BDT-C	С		
NORTH BORIC	ACID FILTER QC	-12 TO CVC	S CHAR	GING	PUMPS C	HEC		VE	FS-O	C	CSJ - 012	
1									FS-O	С	CSJ - 012	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

	· · · ·		Code					Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
1-QCM-250	1-5129A (C8)	ACTIVE	2	GAT	MO	Α	4	0	AI	FSE	R	ROJ - 021	OMN-1	
REACTOR COO	LANT PUMP SEAL	WATER R	ETURN	TRAIN			IENT			LJ	OPB			
ISOLATION VAL	VE									DIAG	3R			
1-QCM-350	1-5129A (D8)	ACTIVE	2	GAT	MO	Α	4	0	Al	FSE	R	ROJ - 021	OMN-1	······
REACTOR COO	LANT PUMP SEAL	WATER R	ETURN	TRAIN	I'B' CONT		IENT			LJ	OPB			
ISOLATION VAL	VE									DIAG	3R			
1-QCR-300	1-5129 (E1)	ACTIVE	2	GLB	AO	A	2	0	С	LJ	OPB			
REACTOR COO	LANT LETDOWN	TRAIN 'B' C	ONTAI	IMENT	SOLATIO					FSE	С	CSJ - 009		
										FST	С	CSJ - 009		
										ST-C	С	CSJ - 009		
										PIT	2A			
1-QCR-301	1-5129 (E1)	ACTIVE	2	GLB	AO	A	2	0	C,	LJ	OPB		-	
REACTOR COO	LANT LETDOWN	TRAIN 'A' C	ONTAI		ISOLATIO					FSE	С	CSJ - 009		
			•••••							FST	C	CSJ - 009		
										ST-C	С	CSJ - 009		
										PIT	2A			
1-QMO-200	1-5129 (J3)	ACTIVE	2	GAT	MO	В	3	0	AI	FSE	С	CSJ - 010	OMN-1	
CVCS CHARGIN VALVE	IG TO REGENER	ATIVE HEAT	T EXCH	ANGE	R TRAIN 'A	4' SHI	UTOF	F		DIAG	6R			
1-QMO-201	1-5129 (J3)	ACTIVE	2	GAT	MO	В	3	0	AI	FSE	С	CSJ - 010	OMN-1	,
CVCS CHARGIN	IG TO REGENER	ATIVE HEAT	T EXCH	ANGE	r train 'e	3' SHI	UTOF	F		DIAG	6R			
1-QMO-225	1-5129 (J7)	ACTIVE	2	GAT	MO	В	2	0	AI	DIAG	6R	· · · · · · · · · · · · · · · · · · ·		
EAST CENTRIF	UGAL CHARGING E-11 SHUTOFF V	PUMP MIN ALVE	II-FLOW	TOR	CP SEAL V	WATE	ER HE	EAT		FSE	18M		OMN-1	
1-QMO-226	1-5129 (G6)	ACTIVE	2	GAT	MO	В	2	0	AI	DIAG	9A			· · · · · · · · · · · · · · · · · · ·
WEST CENTRIF	UGAL CHARGING	9 PUMP MIN ALVE	NI-FLOV	V TO F	RCP SEAL	WAT	ER H	IEAT		FSE	18 M		OMN-1	



Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posit	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments	
1-QMO-410	12-5131 (L3)	ACTIVE	3	GLB	MO	В	2	O/C	Al	DIAG	9A			
EMERGENCY B	ORATION TO CVO	CS CHARGI	NG PUN	/IPS SL	JCTION H	EADE	R			FSE	18M		OMN-1	
1-QMO-451	1-5129A (J5)	ACTIVE	3	GAT	MO	В	4	0	Al	FSE	С	CSJ - 011	OMN-1	
REACTOR COO	LANT LETDOWN	VOLUME C	ontro .Ve	LTAN	K TK-10 T	o cv	CS			DIAG	3R			
1-QMO-452	1-5129A (J5)	ACTIVE	3	GAT	MO	В	4	0	AI	FSE	С	CSJ - 011	OMN-1	
REACTOR COO	LANT LETDOWN MPS TRAIN 'B' SH	VOLUME C	ONTRO .VE	LTAN	K TK-10 T	o cv	cs			DIAG	3R			
1-QRV-111	1-5129 (B4)	ACTIVE	1	GLB	AO	В	2	0	С	FSE	С	CSJ - 007		
REACTOR COC	LANT NORMAL LI		RAIN 'A	' SHUT	OFF VAL	/E				FST	С	CSJ - 007		
						_				ST-C	С	CSJ - 007		
	•									PIT	2A		· · · · ·	
1-QRV-112	1-5129 (B4)	ACTIVE	1	GLB	AO	В	2	0	С	FSE	С	CSJ - 007		
REACTOR COC	LANT NORMAL L	ETDOWN T	RAIN 'B	' SHUT		/E				FST	C	CSJ - 007		
										ST-C	С	CSJ - 007		
										PIT	2A			
1-QRV-113	1-5129A (B1)	ACTIVE	1	GLB	AO	В	1	O/C	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·	
REACTOR COC	LANT EXCESS LE	ETDOWN TO) EXCE	SS LE	TDOWN H	EAT				FST	Q			
EXCHANGER H	E-13 TRAIN 'B' SH	UTOFF VAI	LVE							ST-C	Q			
										PIT	2A			
1-QRV-114	1-5129A (B1)	ACTIVE	1	GLB	AO	В	1	O/C	С	FSE	Q	······································		
REACTOR COC	LANT EXCESS LE			SS LE	TDOWN H	FAT				FST	Q			
EXCHANGER H	E-13 TRAIN 'A' SH	UTOFF VA	LVE					•		ST-C	Q			
										PIT	2A			
1-QRV-251	1-5129 (H4)	ACTIVE	2	GLB	AO	В	3	O/TH	0	FSE	С	CSJ - 033		
CVCS CENTRIP	UGAL CHARGING		SCHAR	GEFI		ROI		VE		FST	С	CSJ - 033		
2.00 02										ST-O	С	CSJ - 033		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-QRV-400	1-5129A (K4)	ACTIVE	3	GLB	AO	В	2	0/C	С	FSE	Q		
NORTH BORIC	ACID BI ENDER C	P-21 TO CV	CS CH		G PLIMPS	SUC		1		FST	Q		
SHUTOFF VAL	VE		00 011					•		ST-C	Q		
										ST-O	Q		
										PIT	2A		
1-QRV-410	12-5131 (G1)	ACTIVE	3	GLB	AO	В	2	C/TH	·C	FSE	Q		
NORTH BORIC	ACID STORAGE	FANK TK-12	N INLE	T FLOV						FST	Q		
										ST-C	Q		
1-QRV-411	12-5131 (L2)	ACTIVE	3	GLB	AO	В	1	С	0	FSE	Q		
NORTH BORIC	ACID FILTER TO	CVCS CHAP		PUMPS		RTH	BORI	с		FST	Q		
ACID BLENDER	R FLOW CONTROL			•••••••				•		ST-O	Q		
										PIT	2A		
1-QRV-412	12-5131 (M2)	ACTIVE	3	GLB	AO	В	2	C/TH	С	FSE	Q		
PRIMARY WAT	FR TO NORTH BO					N IO		-		FST	Q		
										ST-C	Q		
						•				PIT	2A		
1-QRV-451	1-5129A (J3)	ACTIVE	3	GLB	AO	В	2	0/C	С	FSE	Q		na an a
NORTH BORIC	ACID BI ENDER	0P-21 TO RE		R COO		DOW	/N			FST	Q		
VOLUME CONT	ROL TANK SHUT	OFF VALVE								ST-C	Q		
										PIT	2A		
1-QRV-51	1-5129 (C3)	ACTIVE	1	GLB	AO	В	2	O/C	С	FSE	С	CSJ - 031	
CVCS CHARGI	NG TO PRESSUR		ARY SE	PRAY	SHUTOFF	VALV	/E			FST	С	CSJ - 031	
							_			ST-C	С	CSJ - 031	
•										ST-O	C	CSJ - 031	
•- •										PIT	2A		
1-QRV-61	1-5129 (C2)	ACTIVE	2	GLB	AO	В	3	0	0	FSE	Q		
CVCS ALTERN	ATE CHARGING 1	O REACTO	R COO		.00P #1 C	OLD	LEG			FST	Q		
SHUTOFF VAL	VE	0.12.07.0				020				ST-C	Q		
										ST-O	Q		
										PIT	2A		
Revision 4										<u> </u>	······································		E



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

·····		<u></u>	Code		· · · · · · ·			Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-QRV-62	1-5129 (C2)	ACTIVE	2	GLB	AO	В	3	0	0	FSE	Q		
CVCS NORMAL (CHARGING TO F	EACTOR C	OOLAN	T LOO	P #4 COL		.			FST	Q		
SHUTOFF VALVE										ST-C	Q		
										ST-O	Q		
										PIT	2 A		
1-SV-51	1-5129 (E2)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		
REGENERATIVE	HEAT EXCHAN	GER HE-12	LETDO		JTLET SAF	ETY	VALV	/E					
1-SV-54	1-5129A (E4)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		
REACTOR COOL VALVE	ANT PUMP SEA	L WATER H	EAT EX	CHAN	GER HE-1	1 SA	FETY						
1-SV-55	1-5129 (K7)	ACTIVE	2	REL	SA	С	0.75	С		SVT	10A		
RECIPROCATING	G CHARGING PL	JMP PP-49 D	DISCHA	RGE S	AFETY VA	LVE							
1-SV-56	1-5129 (L6)	ACTIVE	2	REL	SA	С	0.75	C		SVT	10A		
CVCS CHARGIN	G PUMPS SUCT	ION HEADE	R SAFE	TY VA	LVE					,			
2-CS-292	2-5129 (H6)	ACTIVE	2	СНК	SA	С	2	С		FS-C	R	ROJ - 003	Condition Monitoring Program
EMERGENCY BC	RATION TO CV	CS CHARGI	NG PU	MPS SI	UCTION H	EADE		IECK		FS-O	R	ROJ - 003	
VALVE										FS-O	С	ROJ - 003	
2-CS-295	2-5129 (G6)	ACTIVE	2	CHK	SA	С	4	0		FS-C	R	ROJ - 025	Condition Monitoring Program
VOLUME CONTR	OL TANK TO C	CS CHARG	ING PU	IMPS S	SUCTION H	IEAD	ER C	HECK		FS-O	Q		
2-CS-297E	2-5129 (H7)	ACTIVE	2	СНК	SA	С	2	O/C		BDT-C	R		
EAST CENTRIFU	GAL CHARGING	B PUMP MIN	I-FLOW	TO R	CP SEAL \	NÁTE	ER HE	AT		FS-O	Q	•	
2-CS-297W	2-5129 (F7)	ACTIVE	2	СНК	SA	С	2	O/C		BDT-C	R		
WEST CENTRIFU	JGAL CHARGIN	g pump min Ve	NI-FLOV	V TO R	CP SEAL	WAT	ER H	EAT		FS-O	Q		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CVCS - Chemical and Volume Control

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
2-CS-299E	2-5129 (H7)	ACTIVE	2	СНК	SA	AC	4	O/C	LT	R/2A		· · · · · · · · · · · · · · · · · · ·
EAST CENTRIF	UGAL CHARGING	BPUMP PP-	50E DIS	CHAR	GE CHEC		VE		FS-C	R	ROJ - 004	
									FS-O	R	ROJ - 004	
2-CS-299W	2-5129 (F7)	ACTIVE	2	CHK	SA	AC	4	O/C	LT	R/2A		
WEST CENTRI	FUGAL CHARGIN	G PUMP PP	-50W D	SCHA	RGE CHE	CK V			FS-C	R	ROJ - 004	
									FS-O	R	ROJ - 004	
2-CS-319	2-5129 (H3)	ACTIVE	2	GLB	MAN	B	3	С	FSE	2A	CSJ - 030	······································
2-QRV-200 BYF	PASS SHUTOFF V	ALVE										
2-CS-321	2-5129 (E3)	ACTIVE	2	СНК	SA	AC	3	0	FS-C	R	ROJ - 005	Condition Monitoring Program
CVCS CHARGI	NG TO REACTOR	COOLANT	SYSTEM			r Iso		NN	LJ	R		
CHECK VALVE									FS-O	Q		
2-CS-325	2-5129 (B3)	ACTIVE	1	CHK	SA	С	2	C/O	FS-C	R	ROJ - 020	Condition Monitoring Program
CVCS CHARGI	NG TO PRESSUR	ZER AUXILI	ARY SF	PRAY (HECK VA	LVE			FS-O	R	ROJ - 020	
									PS-O	R	ROJ - 020	Partial Stroke only if valve is disassembled
2-CS-328-L1	2-5129 (B2)	ACTIVE	1	CHK	SA		3	O/C	FS-C	R	ROJ - 037	Condition Monitoring Program
CVCS ALTERN	ATE CHARGING 1	O REACTO	R COOL	ANT L	OOP #1 C	OLD	LEG		FS-O	R	ROJ - 037	
CHECK VALVE						-			FS-O	Q		
2-CS-328-L4	2-5129 (B3)	ACTIVE	1	CHK	SA	С	3	O/C	FS-C	R	ROJ - 037	Condition Monitoring Program
CVCS NORMAI	L CHARGING TO F	REACTOR C	OOLAN	T LOO	P #4 COLI			ECK	FS-O	R	ROJ - 037	
VALVE					· · · · · · · · · · · · · · · · · · ·				FS-O	Q		
2-CS-329-L1	2-5129 (B2)	ACTIVE	1	СНК	SA	С	3	O/C	FS-C	R	ROJ - 037	Condition Monitoring Program
CVCS ALTERN	ATE CHARGING 1	O REACTO	R COOL	ANT L	OOP #1 C	OLD	LEG		FS-O	R	ROJ - 037	
CHECK VALVE	· ,								FS-O	Q		
2-CS-329-L4	2-5129 (B3)	ACTIVE	1	CHK	SA	С	3	O/C	FS-C	R	ROJ - 037	Condition Monitoring Program
CVCS NORMAL	L CHARGING TO F	REACTOR C		T LOO				-CK	FS-O	R	ROJ - 037	
VALVE				•					FS-O	Q		
2-CS-415-3	12-5131 (F6)	ACTIVE	3	СНК	SA	С	2	0/C	FS-C	Q		
BORIC ACID S	TORAGE TANKS 1	RANSFER F	PUMP P	P-46-3	DISCHAR	RGE C	HEC	ĸ	FS-0	Q		

7



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CVCS - Chemical and Volume Control

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-CS-415-4	12-5131 (F8)	ACTIVE	. 3	СНК	SA	С	2	O/C		FS-C	Q		
BORIC ACID STO	ORAGE TANKS T	RANSFER F	PUMP P	P-46-4	DISCHAR	GE C	CHEC	К		FS-O	Q		
2-CS-426S	12-5131 (M6)	ACTIVE	3	CHK	SA	<u> </u>	1	0/C		BDT-C	R		
SOUTH BORIC A	ACID FILTER QC- ENDER CHECK V	12 TO CVCS ALVE	6 CHAR	GING	PUMPS AI	ND S	OUTH	I		FS-O	Q		
2-CS-427S	12-5131 (L8)	ACTIVE	3	CHK	SA	C	2	С		BDT-C	С		
SOUTH BORIC	ACID FILTER OC-	12 TO CVCS	CHAR	GING	PUMPS CI	HECK		VF		FS-O	C.	CSJ - 012	
0001112011107		12 10 0100				1201		• •		FS-O	С	CSJ - 012	
2-QCM-250	2-5129A (C8)	ACTIVE	2	GAT	MO	A	4	0	Al	FSE	R	ROJ - 021	OMN-1
REACTOR COO			FTURN	TRAIN			IFNT			IJ	OPB		
ISOLATION VAL	.VE					/				DIAG	1R		
2-QCM-350	2-5129A (D8)	ACTIVE	2	GAT	MO	A	4	0	Al	FSE	R	ROJ - 021	OMN-1
REACTOR COO	LANT PUMP SEA		FTURN				IENT			LJ	OPB		
ISOLATION VAL	.VE		2.0.0			,		•		DIAG	3R		
2-QCR-300	2-5129 (E1)	ACTIVE	2	GLB	AO	A	2	0	С	LJ	OPB		
REACTOR COO	ANT I FTDOWN	TRAIN 'B' C	ONTAI	IMENT	ISOLATIC					FSE	C	CSJ - 009	
			0,11,2							FST	С	CSJ - 009	
										ST-C	, C	CSJ - 009	
										PIT	2A		
2-QCR-301	2-5129 (E1)	ACTIVE	2	GLB	AO	A	2	0	С	LJ	OPB		
REACTOR COO		TRAIN 'A' C	ONTAI	MENT		ON V				FSE	C	CSJ - 009	
			0.0.0							FST	С	CSJ - 009	
										ST-C	С	CSJ - 009	
n	· ·									PIT	2A		
2-QMO-200	2-5129 (J3)	ACTIVE	2	GAT	MO	В	3	. 0	AI	FSE	С	CSJ - 010	OMN-1
CVCS CHARGIN VALVE	IG TO REGENER	ATIVE HEAT	T EXCH	ANGEI	r train 'A	V'SH	UTOF	F	•	DIAG	6R		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code	-				Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
2-QMO-201	2-5129 (J3)	ACTIVE	2	GAT	MO	В	3	0	Al	FSE	С	CSJ - 010	OMN-1	
CVCS CHARGIN VALVE	IG TO REGENER/	ATIVE HEAT	EXCH	ANGEF	R TRAIN 'E	3' SHI	JTOF	F		DIAG	6R			
2-QMO-225	2-5129 (H7)	ACTIVE	2	GAT	MO	В	2	0	Al	DIAG	8A	····		
EAST CENTRIF	UGAL CHARGING E-11 SHUTOFF V	PUMP MIN	I-FLOW	TO RO	CP SEAL \	NATE	RHE	AT		FSE	18M		OMN-1	
2-QMO-226	2-5129 (G6)	ACTIVE	2	GAT	MO	В	2	0	Al	DIAG	9A			
WEST CENTRIF	UGAL CHARGING	G PUMP MIN ALVE	II-FLOV	V TO R	CP SEAL	WAT	ER HI	EAT		FSE	18M		OMN-1	
2-QMO-420	12-5131 (L8)	ACTIVE	3	GLB	MO	В	2	O/C	Al	DIAG	9A			
EMERGENCY B	ORATION TO CV(CS CHARGI	NG PUN	MPS SL	JCTION H	EADE	ER		·	FSE	18M		OMN-1	
2-QMO-451	2-5129A (J5)	ACTIVE	3	GAT	MO	В	4	0	AI	FSE	С	CSJ - 011	OMN-1	
REACTOR COO	LANT LETDOWN MPS TRAIN 'A' SH	VOLUME C	ontro .Ve	L TANI	K TK-10 T	o cv	cs			DIAG	3R			· ·
2-QMO-452	2-5129A (J5)	ACTIVE	3	GAT	MO	В	4	0	Al	FSE	С	CSJ - 011	OMN-1	
REACTOR COO CHARGING PU	LANT LETDOWN MPS TRAIN 'B' SH	VOLUME C	ontro .ve	L TAN	K TK-10 T	o cv	CS			DIAG	3R			
2-QRV-111	2-5129 (B4)	ACTIVE	1	GLB	AO	В	2	0	С	FSE	С	CSJ - 007		
REACTOR COO	LANT NORMAL L	ETDOWN T	RAIN 'A	' SHUT		VE				FST	C	CSJ - 007		
										ST-C	С	CSJ - 007		
										PIT	2A			
2-QRV-112	2-5129 (B4)	ACTIVE	1	GLB	AO	В	3	0	С	FSE	С	CSJ - 007		
, REACTOR COO	LANT NORMAL L	ETDOWN T	RAIN 'B	' SHUT		VE				FST	C	CSJ - 007		
										ST-C	С	CSJ - 007		
2 <i>d</i>										PIT	2A			
2-QRV-113	2-5129A (B1)	ACTIVE	1	GLB	AO	В	1	O/C	С	FSE	Q	<u>_</u>		
REACTOR COO	LANT EXCESS LE	ETDOWN TO	D EXCE	SS LET	FDOWN H	EAT				FST	Q			
EXCHANGER H	E-13 TRAIN 'B' S⊦	IUTOFF VAI	LVE							ST-C	Q			
	-									PIT	2A			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posit	tion			Code	······································
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-QRV-114	2-5129A (B1)	ACTIVE	1	GLB	AO	В	1	O/C	С	FSE	Q		
REACTOR COC	DLANT EXCESS LE	TDOWN TO		SSLE		FAT				FST	Q		
EXCHANGER H	E-13 TRAIN 'A' SH	UTOFF VAI	LVE			<u> </u>				ST-C	Q		
										PIT	2A		
2-QRV-251	2-5129 (H4)	ACTIVE	2	GLB	AO	В	3	O/TH	0	FSE	C	CSJ - 033	n an
CVCS CENTRIF	UGAL CHARGING	PUMPS DI	SCHAR	GE FL		ROI		/F		FST	С	CSJ - 033	
0.00002.000					011 00111		•7 \			ST-O	С	CSJ - 033	
2-QRV-400	2-5129A (K4)	ACTIVE	3	GLB	AO	В	2	O/C	С	FSE	Q		······································
SOUTH BORIC	ACID BLENDER C	P-21 TO C	CS CH	ARGIN	G PUMPS	SUC	TION			FST	Q		
SHUTOFF VAL	VE									ST-C	Q		
										ST-O	Q		
										PIT	2 A		
2-QRV-421	12-5131 (L6)	ACTIVE	3	GLB	AO	В	1	C/TH	0	FSE	Q		
SOUTH BORIC	ACID FILTER TO	CVCS CHAF	RGING			ЛТН Р	SORIO	2		FST	Q		
ACID BLENDEF	R FLOW CONTROL			01111 0						ST-O	Q		
										PIT	2A		
2-QRV-422	12-5131 (M6)	ACTIVE	3	GLB	AO	В	2	С/ТН	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
PRIMARY WAT	ER TO SOUTH BO			R FI O	W CONTR	N IO		:		FST	Q		
								•		ST-C	Q		
										PIT	2A		
2-QRV-430	12-5131 (G9)	ACTIVE	. 3	GLB	AO	В	2	С/ТН	С	FSE	Q	·····	
SOUTH BORIC	ACID STORAGE 1	ANK TK-12	S INI FT	FI OV		N VA				FST	Q		
		7 M H X 11 X 12		1 201			· ♥ <u>L.</u>			ST-C	Q		
2-QRV-451	2-5129A (J3)	ACTIVE	3	GLB	AO	В	2	O/C	С	FSE	Q		
SOUTH BORIC	ACID BLENDER C	P-21 TO RE		2003		ทดพ	N			FST	Q		
VOLUME CONT	ROL TANK SHUT	OFF VALVE				/ /				ST-C	Q		
•										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

	i i i i i i i i i i i i i i i i i i i	,	Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-QRV-51	2-5129 (C3)	ACTIVE	1	GLB	AO	В	2	O/C	С	FSE	С	CSJ - 031	
CVCS CHARGI	NG TO PRESSUR		ARY SE	RAYS						FST	С	CSJ - 031	
										ST-C	С	CSJ - 031	
										ST-O	С	CSJ - 031	
										PIT	2A		
2-QRV-61	2-5129 (C2)	ACTIVE	2	GLB	AO	В	3	0	0	FSE	Q		
CVCS ALTERN	ATE CHARGING T	O REACTO			00P #1 C		IEG			FST	Q		
SHUTOFF VAL	VE					010				ST-C	Q	*	
										ST-O	Q		
										PIT	2A		
2-QRV-62	2-5129 (C2)	ACTIVE	2	GLB	AO	В	3	0	.0	FSE	Q		
CVCS NORMA	CHARGING TO F	REACTOR C					3			FST	Q		
SHUTOFF VAL	VE		00244	1 200			•			ST-C	Q		
										ST-O	Q		
										PIT	2A	`	
2-SV-51	2-5129 (E2)	ACTIVE	2	REL	SA	С	2	С		SVT	10A	······································	······································
REGENERATI	/E HEAT EXCHAN	GER HE-12	LETDO	WN OL	JTLET SAI	FETY	VAL	νE					
2-SV-54	2-5129A (E4)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		· · · · · · · · · · · · · · · · · · ·
REACTOR CO	OLANT PUMP SEA	L WATER H	IEAT EX	CHAN	GER HE-1	1 SA	FETY	,					
2-SV-55	2-5129 (K7)	NA	2	REL	SA	С	0.75	5 C		SVT	10A		
RECIPROCATI	NG CHARGING PL	JMP PP-49 I	DISCHA	RGE S	AFETY VA	ALVE							
2-SV-56	2-5129 (L6)	ACTIVE	2	REL	SA	С	0.75	5 C		SVT	10A		
CVCS CHARG	ING PUMPS SUCT	ION HEADE	R SAFE		LVE								



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CWD - Containment Waste Disposal

			Code					Posit	ion		"	Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-DCR-201	12-5137A (E4)	ACTIVE	2	DIA	AO	A	1	. O/Ĉ	С	FSE	Q		· ·
REACTOR COOL	ANT DRAIN TAN	K TO RADIO	DACTIV	E WAS	STE GAS (RES	SORS		FST	Q		
TRAIN 'A' CNTM	FISOLATION VAL	VE						00.10		ST-C	Q		
					·					LJ	OPB	-	
										PIT	2A		
1-DCR-203	12-5137A (F4)	ACTIVE	2	DIA	AO	A	1	O/C	С	FSE	Q		
REACTOR COOL	ANT DRAIN TAN	K TO RADIO		E WAS	STE GAS (RES	SORS		FST	Q		
TRAIN 'B' CNTM	FISOLATION VAL	VE	0/10/11					00110		ST-C	Q		
			·							LJ	OPB		
					· ·					PIT	2A		
1-DCR-205	12-5137A (E7)	ACTIVE	2	DIA	AO	A	4	O/C	С	FSE	Q		
REACTOR COOL			петте	Δ' ΙΝΙ Δ		JMEN	т			FST	Q		
ISOLATION VAL	VE			want z		41415-1	• 1			ST-C	Q		
										LJ	OPB		·
										PIT	2A		
1-DCR-206	12-5137A (E8)	ACTIVE	2	DIA	AO	A	4	0/C	С	FSE	Q		
REACTOR COO						IMEN	JT			FST	Q		
ISOLATION VAL	VE				0011174	4145771.				ST-C	Q		
										IJ	OPB		
		- ; ·								PIT	2A		
1-DCR-207	12-5137A (F4)	ACTIVE	2	DIA	AO	A	1	0	С	FSE	Q		
REACTOR PLAN	IT NITROGEN TO	REACTOR				ς τκ -	1		•	FST	Q.		
CONTAINMENT	ISOLATION VALV	/E	0000		V 17		•			ST-C	Q		
										LJ	OPB		
										PIT	2 A		
1-DCR-600	1-5124 (N6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q	· · · · · · · · · · · · · · · · · · ·	
CONTAINMENT	SUMP PUMPS DI	SCHARGE		TY WA	STE HOL	- BUD	TANK			FST	Q		
TRAIN 'A' CONT	AINMENT ISOLAT	TION VALVE	=					•		ST-C	Q		
										LJ	OPB		
,										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CWD - Containment Waste Disposal

			Code					Posi	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
1-DCR-601	1-5124 (N6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	SUMP PUMPS D	SCHARGE		TY WA	STE HOU					FST	Q		
TRAIN 'B' CONT	AINMENT ISOLAT			•••••	01211021					ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-DCR-610	12-5137A (B8)	ACTIVE	2	DIA	AO	Α	2.5	0	С	FSE	Q		
ICE CONDENSE	ER AHU'S DRAINS		ACTIVE	WAST	E HOLDU	P TA	NKS			FST	Q		
TRAIN 'A' CONT	AINMENT ISOLA	TION VALVE								ST-C	Q		
										LJ	OPB		
		· ·								PIT	2A		
1-DCR-611	12-5137A (B8)	ACTIVE	2	DIA	AO	Α	2.5	0	С	FSE	Q		· · · · ·
ICE CONDENSE	R AHU'S DRAINS			WAST			NKS			FST	Q		
TRAIN 'B' CONT	AINMENT ISOLAT	TION VALVE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-DCR-620	12-5137A (B9)	ACTIVE	2	GLB	AO	Α	1	0	С	FSE	Q		
CNTMT VENTIL	ATION UNITS DR				STE HOU	DUP .	ΓΑΝΚ	s		FST	Q		
TRAIN 'A' CONT	AINMENT ISOLA	FION VALVE					.,	•		ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-DCR-621	12-5137A (B9)	ACTIVE	2	GLB	AO	Α	1	0	С	FSE	Q		···· ···· ··· ··· ··· ··· ··· ··· ···
CNTMT VENTIL	ATION UNITS DR	AIN HEADEI		AD WA	STE HOU	DUP -	TANK	s		FST	Q		
TRAIN 'B' CONT	AINMENT ISOLA	FION VALVE						•		ST-C	Q		
	•									LJ	OPB		
•·										PIT	2A		
2-DCR-201	12-5137A (E4)	ACTIVE	2	DIA	AO	Α	1	0/C	С	FSE	Q		
REACTOR COO	LANT DRAIN TAN		OACTIV		STE GAS (RES	SORS		FST	Q		
TRAIN 'A' CNTM	IT ISOLATION VA	LVE					1.20	00110		ST-C	Q		
										IJ	OPB		•
										PIT	2 A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CWD - Containment Waste Disposal

			Code	_				Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-DCR-203	12-5137A (F4)	ACTIVE	2	DIA	AO	Α	1	O/C	C	FSE	Q		
REACTOR COO	ANT DRAIN TAN			F WAS	STE GAS (RES	SORS		FST	Q		
TRAIN 'B' CNTM	T ISOLATION VAL	VE	0/10/110					00110		ST-C	Q	•	
		*						-		IJ	OPB		
										PIT	2A		
2-DCR-205	12-5137A (E7)	ACTIVE	2	DIA	AO	A	4	O/C	С	FSE	Q		
REACTOR COO	LANT DRAIN TAN	K TK-1 OUT		RAIN 'A	CONTAI	NMEN	л			FST	Q		
ISOLATION VAL	VE									ST-C	Q		
	······									LJ	OPB		
										PIT	2A		
2-DCR-206	12-5137A (E8)	ACTIVE	2	DIA	AO	A	4	O/C	С	FSE	Q		
REACTOR COO	LANT DRAIN TAN	K TK-1 OUT	LET TF	RAIN 'B	CONTAI	NMEN	Л			FST	Q		· .
ISOLATION VAL	VE						••			ST-C	Q		
					•					LJ	OPB		
										PIT	2A		
2-DCR-207	12-5137A (F4)	ACTIVE	2	DIA	AO	Α	1	0	С	FSE	Q		<u></u>
REACTOR PLAN	NT NITROGEN TO	REACTOR	COOLA			к тк -	1			FST	Q		
CONTAINMENT	ISOLATION VALV	Έ					-			ST-C	Q		
										LJ	OPB		
		÷								PIT	2 A		
2-DCR-600	2-5124 (N6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	SUMP PUMPS DI	SCHARGE		TY WA	STE HOL	DUP .	TANK			FST	Q		
TRAIN 'A' CONT	AINMENT ISOLAT	ION VALVE								ST-C	Q		
	•									LJ	OPB		
	·									PIT	2A		
2-DCR+601	2-5124 (N6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
CONTAINMENT	SUMP PUMPS DI	SCHARGE		TY WA	STE HOL	DUP.	TANK			FST	Q ·		
TRAIN 'B' CONT	AINMENT ISOLAT	ION VALVE								ST-C	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: CWD - Containment Waste Disposal

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-DCR-610	12-5137A (B8)	ACTIVE	. 2	DIA	AO	Α	2.5	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
ICE CONDENSE	AHU'S DRAINS			WAST		ΙΡ ΤΔ	NKS			FST	Q		
TRAIN 'A' CONTA	INMENT ISOLAT	ION VALVE		11/101						ST-C	Q.		
										LJ	OPB		
					· .					PIT	2A		
2-DCR-611	12-5137A (B8)	ACTIVE	2	DIA	AO	A	2.5	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
ICE CONDENSE	RAHU'S DRAINS			WAST	FHOLDU		NKS			FST	Q		
TRAIN 'B' CONTA	INMENT ISOLAT	ION VALVE	:							ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-DCR-620	12-5137A (B9)	ACTIVE	2	BALL	. AO	A	1	0	С	FSE	Q		
CNTMT VENTILA	TION UNITS DRA	IN HEADE	R TO R	AD WA	STE HOL	DUP .	TANK	S		FST	Q		
TRAIN 'A' CONTA	INMENT ISOLAT	ION VALVE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-DCR-621	12-5137A (B9)	ACTIVE	2	BALL	. AO	Α	1	0	C	FSE	Q		
CNTMT VENTILA	TION UNITS DRA	IN HEADE	R TO R	AD WA	STE HOL	DUP .	TANK	S		FST	Q		
TRAIN 'B' CONTA	INMENT ISOLAT	ION VALVE	Ξ							ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-SV-341	2-5124 (M6)	ACTIVE	0	REL	SA	С		С		SVT	10A		GL 96-06
CONTAINMENT	SUMP PUMPS DI	SCHARGE	TO DIR	TY WA	STE HOL	DUP	TANK			,		<u>.</u>	

4

Revision 4

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLFO - Diesel Fuel Oil

			Code					Position			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments	
1-DF-108C	1-5151C (J3)	ACTIVE	0	СНК	SA	С	1.5	O/C	FS-C	Q			
CD EMERGENCY	DIESEL FUEL C	IL TRANSF		IP QT-	106-CD1	DISCI	HARG	E	FS-O	Q			
CHECK VALVE									FS-O	Q			
1-DF-109C	1-5151C (K3)	ACTIVE	0	CHK	SA	C	1.5	O/C	FS-C	Q			
CD EMERGENCY	DIESEL FUEL C	IL TRANSF			106-CD2	DISCI	HARG	E	FS-O	Q			
CHECK VALVE									FS-O	Q		·	
1-DF-114A	2-5151A (J3)	ACTIVE	0	CHK	SA	С	1.5	O/C	FS-C	Q			
AB EMERGENCY	DIESEL FUEL O	IL TRANSF		/P QT-	106-AB2 [DISCH	IARG	E	FS-O	Q		<i>,</i>	
CHECK VALVE									FS-O	Q			
1-DF-115A	2-5151A (H3)	ACTIVE	0	CHK	SA	С	1.5	O/C	FS-C	Q			
AB EMERGENCY	DIESEL FUEL C	IL TRANSF		/P QT-	106-AB1 [DISCH	HARG	E	FS-O	Q			
CHECK VALVE			-						FS-O	Q			
2-DF-108A	2-5151A (L3)	ACTIVE	0	CHK	SA	С	1.5	O/C	FS-C	Q	······································		
AB EMERGENCY	DIESEL FUEL C	IL TRANSF	ER PUN	/P QT-	106-AB2 [DISCH	HARG	E	FS-O	Q			
CHECK VALVE									FS-O	Q			
2-DF-109A	2-5151A (K3)	ACTIVE	0	CHK	SA	С	1.5	O/C	FS-C	Q			
AB EMERGENCY	DIESEL FUEL C	IL TRANSF	ER PUN	/P QT-	106-AB1 [DISCH	IARG	E	FS-O	Q			
CHECK VALVE								- ,	FS-O	Q			
2-DF-114C	1-5151C (L3)	ACTIVE	0	CHK	SA	С	1.5	O/C	FS-C	Q			
CD EMERGENCY	DIESEL FUEL C	IL TRANSF			-106-CD1	DISCI	HARG	ε	FS-O	Q			
CHECK VALVE								_	FS-O	Q			
2-DF-115C	1-5151C (M3)	ACTIVE	0	CHK	SA	С	1.5	O/C	FS-C	Q	····	· · · · · · · · · · · · · · · · · · ·	
CD EMERGENCY	DIESEL FUEL C	IL TRANSF	ER PU		-106-CD2	DISC	HARG	ЭЕ	FS-O	Q			
CHECK VALVE	<u> </u>				·····			· ·	FS-O	Q		······································	

1



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLJW - Diesel Jacket Water

			Code					Posi	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	. Fail.	Test	Freq	Dev.	Comments
1-DG-145A	1-5151B (A8)	ACTIVE	0	СНК	SA	С	2	0		FS-C	Q		Skid Mounted
AB EMERGENCY CHECK VALVE	DIESEL AUXILIA	RY JACKE	T WATE	ER HE/	ATER QT-	134-A	BOU	ITLET					
1-DG-145C	1-5151D (A8)	ACTIVE	0	CHK	SA	С	2	0		FS-C	Q		Skid Mounted
CD EMERGENCY OUTLET CHECK	/ DIESEL AUXILI/ VALVE	ARY JACKE	TWAT	ER HE	ATER QT-	134-0	D						
1-DG-151A	1-5151B (D8)	ACTIVE	0	CHK	SA	С	4	С		FS-C	Q		
AB EMERGENCY VALVE	DIESEL JACKET	WATER P	UMP Q	T-131-/	AB1 DISCH	HARG	GE CH	IECK		FS-O	Q		
1-DG-151C	1-5151D (D8)	ACTIVE	0	CHK	SA	С	4	С		FS-C	Q		
CD EMERGENCY VALVE	DIESEL JACKE	T WATER P	ump Q	T-130-(CD1 DISC	HAR	GE CI	HECK		FS-O	Q		
1-DG-153A	1-5151B (C8)	ACTIVE	0	CHK	SA	С	4	C		FS-C	Q		
AB EMERGENCY VALVE	DIESEL JACKET	WATER P	ump q	T-130-/	AB2 DISCI	HARC	ge Ch	IECK		FS-O	Q		
1-DG-153C	1-5151D (C8)	ACTIVE	0	CHK	SA	С	4	C		FS-C	Q		
CD EMERGENC	Y DIESEL JACKE	T WATER P	UMP Q	T-130-	CD2 DISC	HAR	ge Ci	HECK		FS-O	Q		
1-QT-132-AB	1-5151B (E8)	ACTIVE	0	3W	SA	В	6	TH		FSE	Q	·	Skid Mounted
AB EMERGENCY THERMOSTATIC	DIESEL JACKE	r water C Valve	OOLEF	R QT-13	31-AB JAC	KET	WAT	ER					
1-QT-132-CD	1-5151D (E8)	ACTIVE	0	3W	SA	В	6	TH		FSE	Q		Skid Mounted
CD EMERGENCY	Y DIESEL JACKE	T WATER C	COOLEF	R QT-1:	31-CD JAC		WAT	ER					
1-SV-61-AB	1-5151B (A8)	ACTIVE	0	REL	SA	С	1	C		SVT	10A		
AB EMERGENCY VALVE	DIESEL AUXILIA	ARY JACKE	TWAT	ER HE	ATER QT-	134-A	AB SA	FETY		_			
1-SV-61-CD	1-5151D (A8)	ACTIVE	0	REL	SA	B	1	C		SVT	10A		
CD EMERGENC	Y DIESEL AUXILI	ARY JACKE	T WAT	ER HE	ATER QT-	134-0	CD SA	\FETY					



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLJW - Diesel Jacket Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-DG-146A	2-5151B (A8)	ACTIVE	0	СНК	SA	С	2	0		FS-C	Q		Skid Mounted
AB EMERGENCY CHECK VALVE	DIESEL AUXILIA	RY JACKE	T WATE	er he/	ATER QT-	134-A	BOU	TLET					
2-DG-146C	2-5151D (A8)	ACTIVE	0	CHK	SA	С	2	0		FS-C	Q		Skid Mounted
CD EMERGENCY OUTLET CHECK	′ DIESEL AUXILIA VALVE	RY JACKE	T WATI	er he/	ATER QT-	134-0	D						
2-DG-152A	2-5151B (D8)	ACTIVE	0	CHK	SA	С	4	С		FS-C	Q		
AB EMERGENCY VALVE	DIESEL JACKET	WATER P	UMP Q	Г-130-А	AB1 DISCI	IARG	E CH	IECK		FS-O	Q ·		
2-DG-152C	2-5151D (D8)	ACTIVE	0	CHK	SA	С	4	С		FS-C	Q		
CD EMERGENCY VALVE	DIESEL JACKET	WATER P	ump q	T-130-0	CD1 DISC	HAR	GE CH	HECK		FS-O	Q		
2-DG-154A	2-5151B (C8)	ACTIVE	0	CHK	SA	С	4	С		FS-C	Q		
AB EMERGENCY VALVE	DIESEL JACKET	WATER P	ump q	Г-130-/	AB2 DISCI	HARG	SE C⊦	IECK	•	FS-O	Q		
2-DG-154C	2-5151D (C8)	ACTIVE	0	CHK	, SA	С	4	С		FS-C	Q		
CD EMERGENCY VALVE	DIESEL JACKET	WATER P	UMP Q	T-130-(CD2 DISC	HAR	GE CI	HECK		FS-O	Q [,]		
2-QT-132-AB	2-5151B (E8)	ACTIVE	0	3W	SA	В	6	TH		FSE	Q		Skid Mounted
AB EMERGENCY THERMOSTATIC	DIESEL JACKET	WATER C	OOLER	QT-13	B1-AB JAC	KET	WATI	ER					·
2-QT-132-CD	2-5151D (E8)	ACTIVE	0	3W	SA	В	6	TH		FSE	Q		Skid Mounted
CD EMERGENCY THERMOSTATIC	DIESEL JACKET	WATER C	OOLEF	R QT-1:	31-CD JAC	KET	WAT	ER					
2-SV-61-AB	2-5151B (A8)	ACTIVE	0	REL	SA	С	1	С		SVT	10A		
AB EMERGENCY	DIESEL AUXILIA	RY JACKE	T WAT	ER HE/	ATER QT-	134-A	B SA	FETY					
2-SV-61-CD	2-5151D (A8)	ACTIVE	0	REL	SA	С	1	С		SVT	10A		
CD EMERGENCY VALVE	DIESEL AUXILIA	ARY JACKE	T WAT	ER HE	ATER QT-	134-0	CD SA	FETY			·.		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLLO - Diesel Lube Oil

			Code					Posi	tion			Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Type	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-DL-113A	1-5151A (B9)	ACTIVE	0	СНК	SA	С	1.5	O/C	С	FS-C	Q		Skid Mounted
AB EMERGENCY CHECK VALVE	DIESEL BYPAS	s lube oil	FILTER		P QT-119-	AB DI	SCH	ARGE					
1-DL-113C	1-5151C (B9)	ACTIVE	0	CHK	SA	С	1.5	O/C	С	FS-C	Q		Skid Mounted
CD EMERGENCY DISCHARGE CHE	' DIESEL BYPAS ECK VALVE	s lube oil	. FILTEI	R PUM	P QT-119-	CD							
1-DL-115A	1-5151A (B9)	ACTIVE	0	CHK	SA	С	1.5	O/C	С	FS-C	Q		Skid Mounted
AB EMERGENCY FILTER CHECK V	DIESEL FULL FI ALVE	LOW LUBE	OIL FIL	TER T	O BYPAS	s lue	BE OII	L					
1-DL-115C	1-5151C (B9)	ACTIVE	0	CHK	SA	С	1.5	O/C	С	FS-C	Q		Skid Mounted
CD EMERGENCY FILTER CHECK V	' DIESEL FULL F /ALVE	LOW LUBE	OIL FIL	TER T	O BYPAS	S LUE	BE OI	L					
1-DL-125A	1-5151A (E9)	ACTIVE	0	CHK	SA	С	2.5	O/C	С	FS-C	Q		Skid Mounted
AB EMERGENCY DISCHARGE CHE	' DIESEL LUBE C ECK VALVE	IL BEFORE	E AND A	FTER	PUMP PP	-111-/	AB						
1-DL-125C	1-5151C (E9)	ACTIVE	0	CHK	SA	С	2.5	O/C	С	FS-C	Q		Skid Mounted
CD EMERGENCY DISCHARGE CH	Í DIESEL LUBE C ECK VALVE	DIL BEFORE	E AND A	FTER	PUMP QT	-111-	CD						1
1-DL-131A	1-5151A (F9)	ACTIVE	0	CHK	SA	С	1	0/C		FS-C	Q		Skid Mounted
AB EMERGENCY VALVE	DIESEL LUBE C		RPUMP	QT-11	7-AB DISC	CHAR	GE C	HECK					
1-DL-131C	1-5151C (F9)	ACTIVE	0	CHK	SA	С	1	0/C	С	FS-C	Q		Skid Mounted
CD EMERGENCY CHECK VALVE	DIESEL LUBE C	DIL HEATER	r Pump	QT-11	7-CD DIS	CHAF	RGE .	_					
1-DL-157A	1-5151A (G5)	ACTIVE	0	CHK	SA	С	6	0/C		FS-C	Q		Skid Mounted
AB EMERGENCY	DIESEL LUBE C	IL COOLE	R QT-11	0-AB (OUTLET C	HECK	(VAL	VE					
1-DL-157C	1-5151C (G5)	ACTIVE	0	CHK	SA	С	6	0/C	С	FS-C	Q	· · · · · · · · · · · · · · · · · · ·	Skid Mounted
CD EMERGENCY	DIESEL LUBE C	DIL COOLEI	R QT-11	0-CD (OUTLET C	HEC	k val	VE					



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLLO - Diesel Lube Oil

			Code	-				Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-QT-114-AB	1-5151A (H5)	ACTIVE	0	ЗW	SA	С	6	0		FSE	Q		Skid Mounted
AB EMERGENC	Y DIESEL LUBE C VALVE	OIL COOLEF	R QT-11	0-AB L	UBE OIL "	THER	MOS	TATIC					
1-QT-114-CD	1-5151C (H5)	ACTIVE	0	3W	SA	В	6	0		FSE	Q		Skid Mounted
CD EMERGENC	Y DIESEL LUBE (C INLET/BYPASS	DIL COOLEF VALVE	R QT-11	0-CD I	UBE OIL								
2-DL-114A	2-5151A (B9)	ACTIVE	. 0	CHK	SA	С	1.5	O/C		FS-C	Q		Skid Mounted
AB EMERGENC CHECK VALVE	Y DIESEL BYPAS	s lube oil	. FILTEI	R PUM	P QT-119-	AB D	ISCH	ARGE					
2-DL-114C	2-5151C (B9)	ACTIVE	0	СНК	SA	С	1.5	O/C		FS-C	Q		Skid Mounted
CD EMERGENC	Y DIESEL BYPAS IECK VALVE	S LUBE OIL	. FILTE	R PUM	P QT-119	CD							
2-DL-116A	2-5151A (B9)	ACTIVE	0	CHK	SA	С	1.5	0/C		FS-C	Q		Skid Mounted
AB EMERGENC FILTER CHECK	Y DIESEL FULL F VALVE	LOW LUBE	OIL FIL	TER T	O BYPAS	S LUE	BE OI	L					
2-DL-116C	2-5151C (B9)	ACTIVE	0	CHK	SA	С	1.5	O/C		FS-C	Q		Skid Mounted
CD EMERGENC	Y DIESEL FULL F VALVE	LOW LUBE	OIL FI	TER T	O BYPAS	S LUI	BE OI	L					
2-DL-126A	2-5151A (E9)	ACTIVE	0	CHK	SA	С	2.5	0/C		FS-C	Q		Skid Mounted
AB EMERGENC DISCHARGE CH	Y DIESEL LUBE (IECK VALVE	DIL BEFORE	E AND A	FTER	PUMP QT	-111-	AB				·		
2-DL-126C	2-5151C (E9)	ACTIVE	0	CHK	SA	С	2.5	0/C		FS-C	Q		Skid Mounted
CD EMERGENC	Y DIESEL LUBE (IECK VALVE	DIL BEFORI	E AND A	AFTER	PUMP QT	-111-	CD						
2-DL-132A	2-5151A (F9)	ACTIVE	0	CHK	SA	С	1	0/C		FS-C	Q		Skid Mounted
AB EMERGENC	Y DIESEL LUBE (DIL HEATER	R PUMP	QT-11	7-AB DISC	CHAR	GE C	HECK					
2-DL-132C	2-5151C (F9)	ACTIVE	0	CHK	SA	С	1	O/C		FS-C	Q		Skid Mounted
CD EMERGENO CHECK VALVE	Y DIESEL LUBE (OIL HEATER	R PUMP	QT-11	7-CD DIS	CHAF	RGE	···					
Revision 4													2



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLLO - Diesel Lube Oil

Component	PID(Coord)	Function	Code Class	Type	Actuator	Cat	Size	Posit Norm.	tion Fail.	Test	Freq	Code Dev.		Comments
2-DL-158A	2-5151A (G5)	ACTIVE	0	СНК	SA	С	6	O/C		FS-C	Q		Skid Mounted	
AB EMERGENC	Y DIESEL LUBE (DIL COOLEI	R QT-11	0-AB C	OUTLET C	HECK	(VAL)	VE						
2-DL-158C	2-5151C (G5)	ACTIVE	0	CHK	SA	С	6	O/C		FS-C	Q	<u> </u>	Skid Mounted	
CD EMERGENC	Y DIESEL LUBE (DIL COOLEI	R QT-11	0-CD (OUTLET C	HECH	< VAL	.VE						
2-QT-114-AB	2-5151A (H5)	ACTIVE	0	3W	SA	С	6	0	С	FSE	Q		Skid Mounted	
AB EMERGENC	Y DIESEL LUBE (VALVE	DIL COOLEI	R QT-11	0-AB L	UBE OIL	THER	MOS	TATIC			9			• · · · · ·
2-QT-114-CD	2-5151C (H5)	ACTIVE	0	3W	SA	В	6	0	С	FSE	Q		Skid Mounted	· · · · · · · · · · · · · · · ·
CD EMERGENC	Y DIESEL LUBE (C INLET/BYPASS	DIL COOLE	R QT-11	0-CD	LUBE OIL									

3



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLSA - Diesel Starting Air

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
1-DG-101A	1-5151B (H3)	ACTIVE	0	СНК	SA	A/C	0.5	0/C	FS-C	Q		
AB EMERGENCY	DIESEL START	ING AIR CO	MPRES	SOR	T-142-AB	2 00	TLET		FS-O	Q		
CHECK VALVE									LT	Q		
1-DG-101C	1-5151D (H3)	ACTIVE	0	CHK	SA	A/C	0.5	O/C	FS-C	Q		
CD EMERGENC	Y DIESEL START	ING AIR CO	MPRES	SOR C	QT-142-CE)2 OU	TLET	-	FS-O	Q		
CHECK VALVE									LT	Q		
1-DG-103A	1-5151B (G3)	ACTIVE	0	CHK	SA	A/C	0.5	O/C	FS-C	Q		
AB EMERGENC	DIESEL START	ING AIR CO	MPRES	SOR	QT-142-AB	1 OU	TLET		FS-O	Q		
CHECK VALVE					•				LT	Q		
1-DG-103C	1-5151D (G3)	ACTIVE	0	CHK	SA	A/C	0.5	O/C	FS-C	Q		
	Y DIESEL START	ING AIR CO	MPRES	SOR (OT-142-CE		ITLET	r	FS-O	Q		
CHECK VALVE									LT	Q		
1-DG-127A	1-5151B (C3)	ACTIVE	0	CHK	SA	С	1	C	FS-C	Q		· · · · · · · · · · · · · · · · · · ·
AB EMERGENC	OIESEL START	ING AIR RE	CEIVEF	R #2 TC) TURBOC	HAR	GER		FS-O	6M		Skid Mounted
1-DG-127C	1-5151D (C3)	ACTIVE	0	CHK	SA	С	1	С	FS-C	Q		
CD EMERGENC	Y DIESEL START	ING AIR RE	CEIVER	R #2 TC	O TURBOO	CHAR	GER	· .	FS-O	6M		Skid Mounted
1-DG-129A	1-5151B (C3)	ACTIVE	0	CHK	SA	С	1	С	FS-C	Q	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	
AB EMERGENCY CHECK VALVE	Y DIESEL START	ING AIR RE	CEIVEF	R #1 TC) TURBOO	HAR	GER		FS-O	6M		Skid Mounted
1-DG-129C	1-5151D (C3)	ACTIVE	0	CHK	SA	С	1	С	FS-C	Q		
CD EMERGENC	Y DIESEL START	ING AIR RE	CEIVER	R #1 TC	O TURBOO	CHAR	GER		FS-O	6M		Skid Mounted
1-DG-131A	1-5151B (B4)	ACTIVE	0	CHK	SA	С	3	C	FS-C	Q		
AB EMERGENCY VALVE	Y DIESEL' START	ING AIR RE	CEIVEF	۹ QT-1	41-AB2 Ol	JTLE	T CHE	ECK	FS-O	Q		
1-DG-131C	1-5151D (B4)	ACTIVE	0	CHK	SA	С	3	С	FS-C	Q		
CD EMERGENC	Y DIESEL START	'ING AIR RE	CEIVE	R QT-1	41-CD2 O	UTLE	ТСН	ECK	FS-O	Q		


Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-DG-133A	1-5151B (B4)	ACTIVE	0	СНК	SA	С	3	C		FS-C	Q		
AB EMERGENC ^V VALVE	Y DIESEL START	ING AIR RE	CEIVER	QT-14	1-AB1 OL	JTLEI		CK		FS-O	Q		
1-DG-133C	1-5151D (B4)	ACTIVE	0	CHK	SA	С	3	С	• • • • • • • •	FS-C	Q		· · · · · · · · · · · · · · · · · · ·
CD EMERGENC	Y DIESEL START	ING AIR RE	CEIVEF	R QT-14	11-CD1 OI	UTLE	T CH	ECK		FS-O	Q		
1-DG-139A	1-5151B (F1)	ACTIVE	0	CHK	SA	С	0.5	C		FS-C	Q		
AB EMERGENC	Y DIESEL CONTR		YER OT	-143-A		т сн	IECK			FS-C	Q		
VALVE				1.071						FS-O	Q		
										FS-O	Q		
1-DG-139C	1-5151D (F1)	ACTIVE	0	CHK	SA	С	0.5	С		FS-C	Q		
	Y DIESEL CONTE		YFR OT	-143-0		FT CI	HECK	•		FS-C	Q		
ALVE				1.00						FS-O	Q		
										FS-O	Q		
1-DG-141A	1-5151B (F1)	ACTIVE	0	CHK	SA	С	0.5	С		FS-C	Q		
AB EMERGENC	Y DIESEL CONTR		YER OT	-143-A	B1 OUTLE		IECK			FS-C	Q		
VALVE										FS-O	Q		
										FS-O	Q		
1-DG-141C	1-5151D (F1)	ACTIVE	0	CHK	SA	С	0.5	С		FS-C	Q		· · · · · · · · · · · · · · · · · · ·
	Y DIESEL CONTE	ROL AIR DR	YFR OT	-143-0	D1 OUTL	ET CI	HECK			FS-C	Q		
VALVE								•		FS-O	Q		
										FS-O	Q		
1-SV-120-AB	1-5120Y (C1)	ACTIVE	0	REL	SA	С	0.25	C		SVT	10A	······································	· · · · · · · · · · · · · · · · · · ·
I-XTC-301 & 1-X	CTC-302 CONTRO	L AIR SAFE	ETY VAL	VE									
1-SV-120-CD	1-5120Y (J1)	ACTIVE	0	REL	SA	С	0.25	C		SVT	10A	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
4 VTA 206 AND	XTC-307 CONTR		SSURE	SAFE		:							



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Position		······	Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm. Fail.	Test	Freq	Dev.	Comments
1-SV-139-AB	1-5151B (B2)	ACTIVE	0	REL	SA	С	1	С	SVT	10A		
AB EMERGENCY	DIESEL STARTI	NG AIR TO	TURBC	CHAR	GER SAF	ETY ۱	/ALVI	E				
1-SV-139-CD	1-5151D (B2)	ACTIVE	0	REL	SA	С	1	С	SVT	10A		
CD EMERGENCY	DIESEL START	ING AIR TO	TURBO	CHAR	GER SAF	ett v	VALV	E				
1-SV-78-AB1	1-5151B (E3)	ACTIVE	0	REL	SA	С	1	С	SVT	10A		
AB EMERGENCY	DIESEL START	NG AIR RE	CEIVER	2 QT-14	41-AB1 SA	FET	Y VAL	VE				
1-SV-78-AB2	1-5151B (D3)	ACTIVE	0	REL	SA	С	1	С	SVT	10A		
AB EMERGENCY	DIESEL START	NG AIR RE	CEIVEF	QT-14	41-AB2 SA	FET	Y VAL	VE				
1-SV-78-CD1	1-5151D (E3)	ACTIVE	0	REL	SA	С	1	С	SVT	10A		
CD EMERGENCY	DIESEL START	ING AIR RE	CEIVER	R QT-1	41-CD1 S/	AFET	Y VAI	_VE				
1-SV-78-CD2	1-5151D (D3)	ACTIVE	0	REL	SA	С	1	С	SVT	10A		
CD EMERGENCY	DIESEL START	ING AIR RE	CEIVER	R QT-1	41-CD2 S/	AFET	Y VAI	_VE				
1-SV-79-AB1	1-5151B (E1)	ACTIVE	0	REL	SA	C	0.5	C	SVT	10A		
AB EMERGENCY	DIESEL CONTR	OL AIR DR	YER QT	-143-A	B1 SAFE	ry va	LVE					
1-SV-79-AB2	1-5151B (E1)	ACTIVE		RÊL	SA	С	0.5	С	SVT	10A		
AB EMERGENCY	DIESEL CONTR	OL AIR DR	YER QT	-143-A	B2 SAFET		LVE					
, 1-SV-79-CD1	1-5151D (E1)	ACTIVE	0	REL	SA	С	0.5	С	SVT	10A		
	DIESEL CONTR	ROL AIR DR	YER Q	г-143-(D1 SAFE	TY V/	ALVE					
1-SV-79-CD2	1-5151D (E1)	ACTIVE	0	REL	SA	С	0.5	С	SVT	10A		
CD EMERGENCY	OIESEL CONTR	ROL AIR DR	YER Q	Г-143-0	CD2 SAFE	TY V/	ALVE		н			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

· · · · · · · · · · · · · · · · · · ·			Code					Posi	tion	· · · · · · · · · · · · · · · · · · ·		Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-SV-81-AB1	1-5151B (G3)	ACTIVE	0	REL	SA	С	0.25	C		SVT	10A		
AB EMERGENCY VALVE	DIESEL STARTI	NG AIR CO	MPRES	SORC	QT-142-AB	1 SAI	FETY						
1-SV-81-AB2	1-5151B (H3)	ACTIVE	0	REL	SA	С	0.25	C C		SVT	10A		
AB EMERGENCY VALVE	DIESEL START	NG AIR CO	MPRES	SOR	QT-142-AB	2 SAI	FETY						
1-SV-81-CD1	1-5151D (G3)	ACTIVE	0	REL	SA	С	0.25	C		SVT	10A		
CD EMERGENCY VALVE	DIESEL START	ING AIR CO	MPRES	SSOR 1	I-QT-142-(CD1 S	SAFE	ΓY					
1-SV-81-CD2	1-5151D (H3)	ACTIVE	0	REL	SA	С	0.25	i C		SVT	10A		1 A. W. W.
CD EMERGENCY VALVE	DIESEL START	ING AIR CO	MPRES	SSOR 1	I-QT-142-(CD2S	AFET	Y					
1-XRV-220	1-5151B (B3)	ACTIVE	0	GLB	AO	В	1	С	С	FSE	6M		Skid Mounted
AB EMERGENCY CONTROL VALVI	' DIESEL GENER E	ATOR OME	-150-Al	B STAF	RTING AIR	JET	ASSI	ST					
1-XRV-221	1-5151B (B4)	ACTIVE	0	BALL	. AO	В	3	C	AI	FSE	Q.		Skid Mounted
AB EMERGENCY	DIESEL FRONT	BANK STA	RTING	AIR SH	IUTOFF V	ALVE				FSE	, Q		
1-XRV-222	1-5151B (B4)	ACTIVE	0	BALL	. AO	В	3	С	Al	FSE	Q		Skid Mounted
AB EMERGENCY	DIESEL REAR	BANK STAR	TING A	IR SHL	JTOFF VA	LVE				FSE	Q		
1-XRV-225	1-5151D (B3)	ACTIVE	0	GLB	AO	В	1	С	С	FSE	6M		Skid Mounted
CD EMERGENCY CONTROL VALV	/ DIESEL GENER E	RATOR OME	E-150-C	D STAI	RTING AIF	R JET	ASS	IST					
1-XRV-226	1-5151D (B4)	ACTIVE	0	BALL	. AO	B	3	С	Al	FSE	Q		
CD EMERGENCY	DIESEL FRONT	BANK STA	RTING	AIR SH	iutoff v	ALVE	Ξ			FSE	Q		Skid Mounted
1-XRV-227	1-5151D (B4)	ACTIVE	0	BALL	AO	B	3	С	Al	FSE	Q		· · · · · · · · · · · · · · · · · · ·
	DIESEL REAR	BANK STAF	TING A	IR SHU	Jtoff va	LVE	•			FSE	Q		Skid Mounted



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
2-DG-102A	2-5151B (H3)	ACTIVE	0	СНК	SA	A/C	0.5	O/C	FS-C	Q		
AB EMERGENC	Y DIESEL START	ING AIR CO	MPRES	SOR	T-142-AB	200	TI FT		FS-O	Q		
CHECK VALVE						200			LT	Q		
2-DG-102C	2-5151D (H3)	ACTIVE	0	CHK	SA	A/C	0.5	0/C	FS-C	Q		
CD EMERGENC	Y DIESEL START	ING AIR CO	MPRES	SSOR (QT-142-CE)2 OL	ITLET	r	FS-O	Q		
CHECK VALVE									LT	Q		
2-DG-104A	2-5151B (G3)	ACTIVE	0	CHK	SA	A/C	0.5	O/C	FS-C	Q		· · · · · ·
AB EMERGENC	Y DIESEL START	ING AIR CO	MPRES	SOR C	OT-142-AE	1 OU	TLET		FS-O	Q		
CHECK VALVE									LT	Q		
2-DG-104C	2-5151D (G3)	ACTIVE	0	CHK	SA	A/C	0.5	O/C	FS-C	Q		
CD EMERGENC	Y DIESEL START	ING AIR CO	MPRES	SSOR	OT-142-CI		JTL ET	г. Г	FS-O	Q		
CHECK VALVE									LT	Q		
2-DG-128A	2-5151B (C3)	ACTIVE	0	CHK	SA	С	1	C	FS-C	Q		
AB EMERGENC	Y DIESEL START	ING AIR RE	CEIVER	R #2 TC	D TURBOO	CHAR	GER		FS-O	6M		Skid Mounted
2-DG-128C	2-5151D (C3)	ACTIVE	0	CHK	SA	С	1	С	FS-C	Q		
CD EMERGENC	Y DIESEL START	'ING AIR RE	CEIVEI	R #2 TC	O TURBO	CHAR	GER		FS-O	6M		Skid Mounted
2-DG-130A	2-5151B (C3)	ACTIVE	0	CHK	SA	С	1	С	FS-C	Q		
AB EMERGENC	Y DIESEL START	ING AIR RE	CEIVE	R #1 TC	O TURBOO	CHAR	GER		FS-O	6M		Skid Mounted
2-DG-130C	2-5151D (C3)	ACTIVE	0	CHK	SA	С	1	С	FS-C	Q		
CD EMERGENC	Y DIESEL START	'ING AIR RE	CEIVE	R #1 TC	o turbo	CHAR	GER		FS-O	6M		Skid Mounted
2-DG-132A	2-5151B (B4)	ACTIVE	0	CHK	SA	С	3	C	FS-C	Q		
	Y DIESEL START	ING AIR RE	CEIVE	R QT-1	41-AB2 O	UTLE	Т СНІ	ECK	FS-O	Q		
2-DG-132C	2-5151D (B4)	ACTIVE	0	СНК	SA	C	3	С	FS-C	Q		
	Y DIESEL START	ING AIR RE	CEIVE	R QT-1	41-CD2 O	UTLE	ТСН	ECK	FS-0	Q		
Revision 4												E



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLSA - Diesel Starting Air

		. 18 81	Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
2-DG-134A	2-5151B (B4)	ACTIVE	0	СНК	SA	С	3	С	FS-C	Q		
AB EMERGENCY VALVE	DIESEL START	ING AIR RE	CEIVER	QT-14	41-AB1 OL	JTLET	CHE	ECK	FS-O	Q		
2-DG-134C	2-5151D (B4)	ACTIVE	0	CHK	SA	С	3	С	FS-C	Q	•	
CD EMERGENCY	Y DIESEL START	ING AIR RE	CEIVER	R QT-1	41-CD1 OI	JTLE	Т СНІ	ECK	FS-O	Q		1
2-DG-140A	2-5151B (F1)	ACTIVE	0	CHK	SA	C .	0.5	С	FS-C	Q		
AB EMERGENCY	DIESEL CONTR	OL AIR DR	YER QT	-143-A	B2 OUTLE		IECK		FS-C	Q		
VALVE									FS-O	Q		
	· · ·							• •	FS-O	Q		
2-DG-140C	2-5151D (F1)	ACTIVE	0	CHK	SA	С	0.5	С	FS-C	Q		
CD EMERGENC)	DIESEL CONTR		YFR OT	-143-0		FT CI	HECK		FS-C	Q		
VALVE									FS-O	Q		
									FS-O	Q		
2-DG-142A	2-5151B (F1)	ACTIVE	0	CHK	SA	С	0.5	С	FS-C	Q		
AB EMERGENCY	DIESEL CONTR		YER OT	-143-A		ET CH	IECK		FS-C	Q		
VALVE									FS-O	Q		
									FS-O	Q		
2-DG-142C	2-5151D (F1)	ACTIVE	0	CHK	SA	С	0.5	С	FS-C	Q		······································
CD EMERGENC	Y DIESEL CONTE		YFR OT	-143- 0		ET CI	HECK		FS-C	Q		
VALVE								•	FS-O	Q		
									FS-O	Q		
2-SV-120-AB	2-5120Y (C1)	ACTIVE	0	REL	SA	С	0.25	5 C	SVT	10A		
2-XTC-301 & 2-X	TC-302 CONTRO	L AIR SAFE	TY VAL	VE								
2-SV-120-CD	2-5120Y (J1)	ACTIVE	0	REL	SA	С	0.25	5 C	SVT	10A	······································	
2-XTC-306 AND	2-XTC-307 CONT	ROL AIR SA	AFETY V	VALVE								



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: DSLSA - Diesel Starting Air

			Code					Pos	tion			Code	
Component	PID(Coord)	Function	Class	Type	Actuator	Cat.	Size	Norm	Fail.	Test	Freq	Dev.	Comments
2-SV-139-AB	2-5151B (B2)	ACTIVE	0	REL	SA	С	1	С		SVT	10A		
AB EMERGENCY	DIESEL STARTI	NG AIR TO	TURBC	CHAR	GER SAFI	ETY \	/ALVI	E _.		·			
2-SV-139-CD	2-5151D (B2)	ACTIVE	0	REL	SA	С	. 1.	С		SVT	10A		
CD EMERGENCY	DIESEL STARTI	NG AIR TO	TURBO	CHAR	GER SAF	ETY	VALV	E					
2-SV-78-AB1	2-5151B (E3)	ACTIVE	0	REL	SA	С	1	С		SVT	10A		······
AB EMERGENCY	DIESEL STARTI	NG AIR RE	CEIVER	QT-14	1-AB1 SA	FET	Y VAL	VE					
2-SV-78-AB2	2-5151B (D3)	ACTIVE	0	REL	SA	С	1	C		SVT	10A		· · · · · · · · · · · · · · · · · · ·
AB EMERGENCY	DIESEL STARTI	NG AIR RE	CEIVER	QT-14	11-AB2 SA	FET	Y VAL	.VE					
2-SV-78-CD1	2-5151D (E3)	ACTIVE	0	REL	SA	С	1	С		SVT	10A		
CD EMERGENCY	DIESEL STARTI	NG AIR RE	CEIVEF	R QT-14	41-CD1 S/	\FET	y val	.VE					
2-SV-78-CD2	2-5151D (D3)	ACTIVE	0	REL	SA	С	1	С		SVT	10A		
CD EMERGENCY	DIESEL STARTI	ING AIR RE	CEIVEF	R QT-14	41-CD2 S/	\FET	y vai	VE					
2-SV-79-AB1	2-5151B (E1)	ACTIVE	Q	REL	SA	С	0.5	С		SVT	10A		
AB EMERGENCY	DIESEL CONTR	OL AIR DR'	YER QT	-143-A	B1 SAFE1	Y VA	LVE						
2-SV-79-AB2	2-5151B (E1)	ACTIVE	0	REL	SA	С	0.5	С		SVT	10A		
AB EMERGENCY	DIESEL CONTR	ol air dr'	YER QT	-143-A	B2 SAFET	Y VA	LVE						
2-SV-79-CD1	2-5151D (E1)	ACTIVE	0	REL	SA	C	0.5	С		SVT	10A		
	DIESEL CONTR	OL AIR DR	YER QI	-143-0	D1 SAFE	TY V/	ALVE						
2-SV-79-CD2	2-5151D (E1)	ACTIVE	0	REL	SA	С	0.5	С	i	SVT	10A		
CD EMERGENCY	DIESEL CONTR	OL AIR DR	YER Q1	-143-0	D2 SAFE	TY V/	ALVE						



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-SV-81-AB1	2-5151B (G3)	ACTIVE	0	REL	SA	С	0.25	С		SVT	10A		· · · · · · · · · · · · · · · · · · ·
AB EMERGENCY VALVE	DIESEL STARTI	NG AIR CO	MPRES	SOR	QT-142-AB	1 SAI	FETY				:		
2-SV-81-AB2	2-5151B (H3)	ACTIVE	0	REL	SA	С	0.25	C		SVT	10A		
AB EMERGENCY VALVE	DIESEL STARTI	NG AIR CO	MPRES	SOR	QT-142-AB	2 SAI	FETY			·			
2-SV-81-CD1	2-5151D (G3)	ACTIVE	0	REL	SA	С	0.25	C		SVT	10A		· · · · · · · · · · · · · · · · · · ·
CD EMERGENCY VALVE	DIESEL START		MPRES	SOR	QT-142-CE	01 SA	FETY	,			•		
2-SV-81-CD2	2-5151D (J3)	ACTIVE	0	REL	SA	С	0.25	C		SVT	10A		
CD EMERGENCY	DIESEL START	ING AIR CC	MPRES	SOR	QT-142-CE	02 SA	FETY	,					
2-XRV-220	2-5151B (B3)	ACTIVE	0	GLB	ÂÔ	В	1	С	С	FSE	6M		Skid Mounted
AB EMERGENCY CONTROL VALV	/ DIESEL GENER E	ATOR OME	E-150-Al	3 STAF	RTING AIR	JET	ASSI	ST					
2-XRV-221	2-5151B (B4)	ACTIVE	0	BALL	- AO	В	3	С	AI	FSE	Q		
AB EMERGENCI	DIESEL FRONT	BANK STA	RTING	AIR SH	HUTOFF V	ALVE				FSE	Q		Skid Mounted
2-XRV-222	2-5151B (B4)	ACTIVE	0	BALL	- AO	В	3	C	AI	FSE	Q		
AB EMERGENCY	DIESEL REAR E	BANK STAR	TING A	IR SHU	JTOFF VA	LVE				FSE	Q		Skid Mounted
2-XRV-225	2-5151D (B3)	ACTIVE	0	GLB	AO	В	1	С	С	FSE	6M		Skid Mounted
CD EMERGENCY CONTROL VALV	Y DIESEL GENEF E	RATOR OME	E-150-C	D STA	RTING AIF	R JET	ASS	IST					
2-XRV-226	2-5151D (B4)	ACTIVE	0	BALL	_ AO	В	3	С	AI	FSE	Q		
CD EMERGENCY	Y DIESEL FRONT	BANK STA	RTING	AIR Sł	hutoff v	'AL.VE	Ξ			FSE	Q		Skid Mounted
2-XRV-227	2-5151D (B4)	ACTIVE	0	BALL	_ AO	В	3	С	AI	FSE	Q		n an
CD EMERGENC	Y DIESEL REAR I	BANK STAF	RTING A	IR SH	UTOFF VA	LVE				FSE	Q		Skid Mounted
												•	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code					Positi	ion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-ESW-101E	1-5113 (D3)	ACTIVE	3	СНК	SA	С	20	O/C		FS-C	Q		
EAST ESSENTIAL	L SERVICE WAT VALVE	ER PUMP D	DISCHA	RGE S	TRAINER	OME	-34E			FS-O	Q		
1-ESW-101W	1-5113 (D7)	ACTIVE	3	CHK	SA	С	20	O/C		FS-C	Q		
WEST ESSENTIA OUTLET CHECK	L SERVICE WA VALVE	TER PUMP	DISCHA	ARGE S	STRAINER	OME	E-34V	V		FS-O	Q		
1-ESW-109	1-5113 (G5)	ACTIVE	3	GAT	MAN	В	4	С		FSE	2A		
ESSENTIAL SER' SHUTOFF VALVE	VICE WATER TO	DEAST MOT	for Dr	IVEN A	UXILIAR	/ FEE	D PU	IMP					
1-ESW-110	1-5113 (G6)	ACTIVE	3	GAT	MAN	В	1	0		FSE	2A		· ·
EMERGENCY ES WMO-753 & ESW	W SUPPLY TO '	TURBINE DE DRAIN VAL	riven / .ve	AUX FE	ED PP VA	ALVE:	S						
1-ESW-111	1-5113 (F6)	ACTIVE	3	CHK	SA	С	6	С		BDT-C	R		Condition Monitoring Program
WEST ESSENTIA DIESEL HEAT EX	AL SERVICE WA	TER SUPPL	Y HEAD	DER TO	O AB EME	RGE	NCY			FS-O	Q		
1-ESW-112	1-5113 (F5)	ACTIVE	3	CHK	SA	С	6	С		BDT-O	R		Condition Monitoring Program
EAST ESSENTIA AB HEAT EXCHA	L SERVICE WAT	TER SUPPLY	Y HEAD	ER TO	AB EMER	RGEN	CY D	IESEL		FS-C	R	ROJ - 007	
1-ESW-113	1-5113 (E5)	ACTIVE	3	CHK	SA	С	6	С		BDT-C	R		Condition Monitoring Program
EAST ESSENTIA DIESEL HEAT EX	L SERVICE WAT	TER SUPPL' IECK VALVE	Y HEAD	ER TO	CD EME	RGEN	ICY		-	FS-O	Q		
1-ESW-114	1-5113 (E6)	ACTIVE	3	CHK	SA	С	6	С		BDT-O	R		Condition Monitoring Program
WEST ESSENTIA DIESEL HEAT EX	AL SERVICE WA	TER SUPPLIECK VALVE	Y HEAI	DER TO	O CD EME	RGE	NCY			FS-C	R	ROJ - 007	
1-ESW-115	1-5113 (F5)	ACTIVE	3	GAT	MAN	В	6	С		FSE	2A		
ESSENTIAL SER SHUTOFF VALVE	VICE WATER TO	D TURBINE	DRIVE	N AUXII	LIARY FEI	ED PI	JMP				н - С		
1-ESW-116	1-5113 (G5)	ACTIVE	3	GAT	MAN	В	. 1	0		FSE	2A		
EMERGENCY ES WMO-754 & ESW	W SUPPLY TO	EAST MOTO	DR DRI\ .VE	/EN AL	JX FEED F	PP VA	LVE	S					

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Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code					Posi	tion	· · · · · · · · · · · · · · · · · · ·		Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-ESW-168N	1-5113 (B1)	ACTIVE	3	BTF	MAN	В	3	С		FSE	2A		
ESSENTIAL SERV	/ICE WATER TO INIT HV-ACRA-1	CONTROL SHUTOFF	ROOM VALVE	VENT	NORTH A	IR							
1-ESW-168S	1-5113 (B9)	ACTIVE	3	BTF	MAN	В	3	С		FSE	2A		
ESSENTIAL SERV	/ICE WATER TO INIT HV-ACRA-2	CONTROL SHUTOFF	ROOM VALVE	VENT	SOUTH A	IR							
1-ESW-169N	1-5113 (C2)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		······································
CONTROL ROOM	A/C NORTH LIQ	UID CHILLI	ER CON	IDENS	ER ESSEI	NTIAL	SEF	RVICE					
1-ESW-169S	1-5113 (C9)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CONTROL ROOM	AVC SOUTH LIQ	UID CHILLI	ER CON	IDENS	ER ESSEI	NTIAL	SER	VICE					· · · · · · · · · · · · · · · · · · ·
1-ESW-170N	1-5113 (D2)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CONTROL ROOM	A/C NORTH LIQ	UID CHILLI E	ER CON	IDENS	ER ESSE	NTIAI	LSEF	RVICE					
1-ESW-170S	1-5113 (D9)	ACTIVE	3	BTF	MAN	В	3	. 0		FSE	2A		
CONTROL ROOM	A/C SOUTH LIQ	UID CHILLI E	ER CON	IDENS	ER ESSE	NTIA	SEF	RVICE					· · · · · · · · · · · · · · · · · · ·
1-ESW-171N	1-5113 (E1)	ACTIVE	3	BTF	MAN	В	3	C		FSE	2A		
CONTROL ROOM	VENT NORTH A		/-ACRA	-1 EME	ERGENCY	'ESV	VOUT	rlet 					
1-ESW-171S	1-5113 (E9)	ACTIVE	3	BTF	MAN	B	3	С		FSE	2A		
CONTROL ROOM	I VENT SOUTH A		/-ACRA	-2 EME	ERGENCY	'ESW	1001	ILET					
1-ESW-243	1-5113 (E2)	ACTIVE	3	GAT	MAN	В	4	C		FSE	2A		
ESSENTIAL SERV	VICE WATER TO	WEST MO	TOR DE	RIVEN	AUXILIAR	YFE	ED PI	UMP					
1-ESW-244	1-5113 (E3)	ACTIVE	3	GAT	MAN	В	1	0		FSE	2A		
1-WMO-744 & 1-E	ESW-243 TELLTA	LE SHUTO	FF VAL	VE									

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-ESW-296	1-5113 (B1)	ACTIVE	3	GAT	MAN	В	3	С	-	FSE	2A		
EMERGENCY ES	W SUPPLY TO N	NORTH CRA		1-HV-/	ACRA-1 SI	HUTC	OFF V	ALVE					
1-ESW-298	1-5113 (B9)	ACTIVE	3	GAT	MAN	В	3	С		FSE	2A	. ,	
EMERGENCY ES	SW SUPPLY TO S	SOUTH CRA		1-HV-/	ACRA-2 SI	HUTC	OFF V	ALVE					
1-QP-56E	1-5113 (L2)	ACTIVE	0	VENT	SA	С	0.5	С		FS-C	Q		
EAST CONTAINN VALVE	IENT SPRAY HE	AT EXCHAN	IGER H	E-18E	SHELL SI	DE V	ENT						
1-QP-56W	1-5113 (L5)	ACTIVE	0	VENT	SA	С	0.5	С		FS-C	Q		
WEST CONTAINI VALVE	MENT SPRAY HE	EAT EXCHA	NGER	HE-18V	V SHELL S	SIDE	VENT	•					
1-SV-14E	1-5113 (K2)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		Thermal Relief
EAST CONTAINN	MENT SPRAY HE	AT EXCHAN	NGER H	E-18E	SHELL SI	DE S	AFET	Y					
1-SV-14W	1-5113 (K6)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		Thermal Relief
WEST CONTAIN	MENT SPRAY HE	EAT EXCHA	NGER	HE-18V	V SHELL S	SIDE	SAFE	TY					
1-SV-15E	1-5113 (J2)	ACTIVE	3	REL	SA	С	0.75	C C		SVT	10A	· · · · · · · · · · · · · · · · · · ·	Thermal Relief
EAST COMPONE SAFETY VALVE	ENT COOLING W	ATER HEAT	L EXCH	ANGE	R HE-15E	TUBE	E SIDE	Ξ					
1-SV-15W	1-5113 (J8)	ACTIVE	3	REL	SA	С	0.75	5 C		SVT	10A		Thermal Relief
WEST COMPON SAFETY VALVE	ENT COOLING V	VATER HEA	TEXCH	IANGE	R HE-15W	/ TUE	BE SIC	DE					
, 1-SV-16-AB	1-5113A (E2)	ACTIVE	3	REL	SA	С	1	C		SVT	10A		Thermal Relief
AB EMERGENC	Y DIESEL JACKE R OUTLET SAFE	ET WATER (TY VALVE	COOLE	R QT-1	31-AB ES	SENT	'IAL						
1-SV-16-CD	1-5113A (E6)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		Thermal Relief
CD EMERGENC	Y DIESEL JACKE R OUTLET SAFE	T WATER O	COOLER	R QT-1:	31-CD ES	SENT	IAL						

ATT AMERICAN* ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code					Posit	ion			Code	······································
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-T-131-1	1-5113 (B3)	ACTIVE	3	VENT	SA	С	0.75	0/C		FS-C	Q		
EAST ESSENTIAL WEST BASKET A	SERVICE WATE	ER PUMP D	ISCHA	RGE S	TRAINER	OME	-34E						
1-T-131-2	1-5113 (B3)	ACTIVE	3	VENT	SA	С	0.75	O/C		FS-C	Q	1	
EAST ESSENTIAL BASKET AUTO VI	SERVICE WATI	er pump d	ISCHA	RGE S	TRAINER	OME	-34E I	EAST					
1-T-131-3	1-5113 (B7)	ACTIVE	3	VENT	SA	С	0.75	O/C		FS-C	Q		
WEST ESSENTIA WEST BASKET A	L SERVICE WAT UTO VENT TRAF	er pump i	DISCHA	ARGE S	STRAINER	OME	E-34W	1					
1-T-131-4	1-5113 (B7)	ACTIVE	3	VENT	SA	С	0.75	O/C		FS-C	Q		
WEST ESSENTIA EAST BASKET AU	L SERVICE WAT	ER PUMP I	DISCHA	ARGE	STRAINER	OME	E-34W	1					
1-T-131-5	1-5113A (D8)	ACTIVE	3	VENT	SA	С	.75	O/C		FS-C	Q		
AB EMERGENCY AUTO VENT TRA	DIESEL NORTH	COMBUST	ION AII	R AFTE	RCOOLE	r he	-47-Al	BN					
1-T-131-6	1-5113A (C7)	ACTIVE	-3	VENT	SA	C	.75	0/C		FS-C	Q		· · · · · · · · · · · · · · · · · · ·
AB EMERGENCY AUTO VENT TRA	DIESEL SOUTH P	COMBUST	ION AIF	RAFTE	RCOOLEI	r he	-47-AI	35					
1-T-131-7	1-5113A (D4)	ACTIVE	3	VENT	r sa	С	.75	O/C		FS-C	Q		
CD EMERGENCY AUTO VENT TRA	DIESEL NORTH	COMBUST	ION AI	R AFTE	ERCOOLE	r he	-47-C	DN					
1-T-131-8	1-5113A (C2)	ACTIVE	3	VENT	r sa	С	.75	O/C		FS-C	Q		
CD EMERGENCY AUTO VENT TRA	DIESEL SOUTH	COMBUST	'ION All	R AFTE	ERCOOLE	R HE	-47-C	DS					
1-WMO-701	1-5113 (D3)	ACTIVE	3	BTF	MO	В	20	O/C	AI	DIAG	54M		
EAST [®] ESSENTIAI	SERVICE WAT	er pump f	PP-7E D	ISCHA	RGE SHU	TOF	= VAL	VE		FSE	18M		OMN-1
1-WMO-702	1-5113 (D7)	ACTIVE	3	BTF	MO	В	20	0/C	Al	DIAG	54M		
WEST ESSENTIA	L SERVICE WA1	ER PUMP	PP-7W	DISCH	IARGE SH	UTO	FF VA	LVE		FSE	18M		OMN-1



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code	,				Posi	tion			Code			
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.		Comments	
1-WMO-705	1-5113 (D8)	ACTIVE	3	BTF	MO	В	20	0	Al	DIAG	9A				
WEST ESSENTIA	AL SERVICE WA	TER SUPPL	Y HEAD	DER CF	ROSSTIE -	ro un	NIT 2			FSE	18M		OMN-1		
1-WMO-707	1-5113 (D4)	ACTIVE	3	BTF	MO	В	20	0	Al	DIAG	9A		. , ₄₁₄₀		
EAST ESSENTIA SHUTOFF VALVI	L SERVICE WAT	TER SUPPLY	(HEAD	ER CR	OSSTIE T	'O UN	IT 2	. *		FSE	18M		OMN-1		
1-WMO-711	1-5113 (H3)	PASSIVE	3	BTF	MO	В	12	0	AI	PIT	2A		· · · · · · · · · · · · · · · · · · ·		
EAST CONTAIN	MENT SPRAY HE HUTOFF VALVE	EAT EXCHAN	IGER H	E-18E	ESSENTI	AL SE	RVIC	E							
1-WMO-713	1-5113 (M3)	ACTIVE	3	BTF	MO	В	12	С	AI	DIAG	18M				
EAST CONTAIN	MENT SPRAY HE	EAT EXCHAN VE	IGER H	IE-18E	ESSENTI	AL SE	RVIC	E		FSE	18M		OMN-1		
1-WMO-715	1-5113 (H7)	PASSIVE	3	BTF	MO	В	12	0	AI	PIT	2A				
WEST CONTAIN WATER INLET S	MENT SPRAY H HUTOFF VALVE	EAT EXCHA	NGER	1-HE-18	BW ESSE	NTIAL	SER	VICE							
1-WMO-717	1-5113 (M7)	ACTIVE	3	BTF	MO	В	12	С	AI	DIAG	54M				
WEST CONTAIN OUTLET SHUTO	MENT SPRAY H FF VALVE	EAT EXCHA	NGER	ESSEN	TIAL SER	VICE	WAT	ER		FSE	18M		OMN-1		
1-WMO-721	1-5113 (F6)	ACTIVE	3	BTF	MO	В	6	С	Al	DIAG	9A				
WEST ESSENTIA	AL SERVICE WA KCHANGERS SH	TER SUPPL	Y HEAI Ve	DER TO	O AB EME	RGEN	ICY			FSE	18M		OMN-1		·
1-WMO-723	1-5113 (F5)	ACTIVE	3	BTF	MO	В	6	C	Al	DIAG	9A				
EAST ESSENTIA AB HEAT EXCHA	AL SERVICE WA	TER SUPPL'	Y HEAD	ER TO	ABEMER	RGEN	CYD	IESEL		FSE	18M		OMN-1		
1-WMO-725	1-5113 (E5)	ACTIVE	3	BTF	MO	В	6	C	Al	DIAG	9A				
EAST ESSENTIA DIESEL HEAT E	AL SERVICE WAT CHANGERS SH	TER SUPPLY	Y HEAD .VE	ER TO	CD EME	RGEN	ICY			FSE	18M		OMN-1		
1-WMO-727	1-5113 (E6)	ACTIVE	3	BTF	MO	В	6	С	Al	DIAG	9A				·
WEST ESSENTIA DIESEL HEAT E	AL SERVICE WA XCHANGERS SH	TER SUPPL	Y HEAI VE		D CD EME	RGE	NCY			FSE	18M		OMN-1		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PiD(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WMO-731	1-5113 (G2)	PASSIVE	3	BTF	MO	B	16	0	AI	PIT	2A		
EAST COMPONE SERVICE WATE	ENT COOLING W	ATER HEAT	EXCH	ANGEF	R HE-15E	ESSE	INTIA	L					
1-WMO-733	1-5113 (G2)	ACTIVE	3	BTF	MO	В	16	0/C	AI	DIAG	54M		
EAST COMPONE SERVICE WATE	ENT COOLING W	ATER HEAT	EXCH	ANGEF	R HE-15E	ESSE	INTIA	L		FSE	18M		OMN-1
1-WMO-735	1-5113 (G8)	PASSIVE	3	BTF	MO	B	16	0	AI	PIT	2A		
WEST COMPON WATER INLET S	ENT COOLING V HUTOFF VALVE	VATER HEA	T EXCH	IANGE	RESSEN	TIAL	SERV	/ICE					
1-WMO-737	1-5113 (G8)	ACTIVE	3	BTF	MO	В	16	O/C	AI	DIAG	54M		
WEST COMPON	ENT COOLING V	VATER HEA Ve	TEXCH	IANGE	R ESSEN	TIAL	SERV	/ICE	· .	FSE	18M		OMN-1
1-WMO-744	1-5113 (D2)	ACTIVE	3	GAT	MO	В	4	C	AI	DIAG	9A		
ESSENTIAL SEF	VICE WATER TO	O WEST MO	TOR DI	RIVEN	AUXILIAR	Y FEI	ED PI	UMP		FSE	18M		OMN-1
1-WMO-753	1-5113 (H5)	ACTIVE	3	BTF	MO	В	6	С	AI	DIAG	9A		
ESSENTIAL SEF	RVICE WATER TO	O TURBINE I	DRIVEN	I AUXII	LIARY FE	ED PL	JMP I	PP-4		FSE	18M		OMN-1
1-WMO-754	1-5113 (H5)	ACTIVE	3	BTF	MO	В	4	C	AI	DIAG	9A		
ESSENTIAL SEF	VICE WATER TO	DEAST MOT	for Dr	IVEN A	AUXILIARY	Y FEE	ED PL	IMP		FSE	18M		OMN-1
1-WRV-721	1-5113A (A7)	ACTIVE	3	3W	AO	B	4	0		FSE	Q		Skid Mounted
AB EMERGENC	Y DIĘSEL SOUTI PASS VALVE	I COMBUST	ION AIF	R AFTE	RCOOLE	r he	-47-A	BS		·			
1-WRV-723	1-5113A (B9)	ACTIVE	3	-3W	ÂÔ	B	- 4	0		FSE	Q		Skid Mounted
AB EMERGENC ESW INLET/BYF	Y DIESEL NORTH PASS VALVE	H COMBUST	ION AII	R AFTE	RCOOLE	r he	-47-A	BN					
1-WRV-725	1-5113A (A2)	ACTIVE	3	3W	AO	В	4	0	0	FSE	Q		Skid Mounted
CD EMERGENC ESW INLET/BYF	Y DIESEL SOUTI PASS VALVE		TON AII		ERCOOLE	R HE	-47-C	DS			·····	<u></u>	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code				<u></u>	Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WRV-727	1-5113A (B4)	ACTIVE	3	3W	AO	В	4	Ö	0	FSE	Q		Skid Mounted
CD EMERGENCY ESW INLET/BYP	OIESEL NORTH	I COMBUST	'ION AIF	R AFTE	RCOOLEI	R HE-	47-C	DN					
1-WRV-761	1-5113 (C4)	ACTIVE	3	GLB	AO	В	6	O/C	С	FSE	Q		······································
EAST ESSENTIA	L SERVICE WAT	ER PUMP F	P-7E D	ISCHA	RGE STR			ST		FST	Q		
BASKET BACKW	ASH OUTLET SI	IUTOFF VA	LVE							ST-C	Q		
										ST-O	Q		
1-WRV-762	1-5113 (C8)	ACTIVE	3	GLB	AO	В	6	0/C	С	FSE	Q		
WEST ESSENTIV	AL SERVICE WA		PP-7W	DISCH	ARGE ST	RAIN	R F	AST		FST	Q		
BASKET BACKW	ASH OUTLET SI	HUTOFF VA	LVE	2.001						ST-C	Q		
										ST-O	Q		
1-WRV-766	1-5113 (C3)	ACTIVE	3	GLB	AO	В	4	O/C	С	FSE	Q		
FAST ESSENTIA	L SERVICE WAT		P-7E D	ISCHA	RGE STR			ST		FST	Q		
BASKET BACKW	ASH INLET SHU	TOFF VALV	Έ							ST-C	Q		
										ST-O	Q		
1-WRV-767	1-5113 (C6)	ACTIVE	3	GLB	AO	В	4	O/C	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
WEST ESSENTI	AL SERVICE WA		PP-7W	DISCH	ARGE ST	RAIN	FR F/	AST		FST	Q		
BASKET BACKW	ASH INLET SHU	TOFF VALV	/E	5,001						ST-C	Q		
							· .			ST-O	Q		
1-WRV-771	1-5113 (C4)	ACTIVE	3	GLB	AO	В	6	0/C	C	FSE	Q		
FAST ESSENTIA	L SERVICE WAT		PP-7F D	ISCHA	RGF STR		R WF	ST		FST	Q		
BASKET BACKW	ASH OUTLET S	HUTOFF VA	LVE							ST-C	Q		
		•	-							ST-O	Q		
1-WRV-772	1-5113 (C8)	ACTIVE	3	GLB	AO	B	6	0/C	С	FSE	Q		
WEST ESSENTI	AL SERVICE WA		PP_7\//	DISCH			FR W	/EST		FST	Q		
BASKET BACKW	ASH OUTLET S	HUTOFF VA	LVE	2.001		w uru		201		ST-C	Q		
										ST-O	Q		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posit	ion			Code	· · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WRV-776	1-5113 (C3)	ACTIVE	3	GLB	AO	В	4	O/C	С	FSE	Q		
EAST ESSENTIA	L SERVICE WA	TER PUMP P	P-7E D	ISCHA	RGE STR	AINE	R WE	ST		FST	Q ·		
BASKET BACKW	ASH INLET SHU	JTOFF VALV	E							ST-C	Q		
										ST-O	Q		
1-WRV-777	1-5113 (C7)	ACTIVE	3	GLB	AO	В	4	0/C	С	FSE	Q		
WEST ESSENTI	AL SERVICE WA	TER PUMP	P-7W	DISCH	ARGE STI	RAINI	ER W	ĖST		FST	Q		
BASKET BACKW	ASH INLET SHU	JTOFF VALV	E							ST-C	Q		
										ST-O	Q		
2-ESW-102E	2-5113 (D3)	ACTIVE	3	CHK	SA	С	20	O/C		FS-C	Q	· · · · ·	
EAST ESSENTIA	AL SERVICE WA	ter pump d	ISCHA	RGE S	TRAINER	OME	-34E			FS-O	Q		
2-ESW-102W	2-5113 (D7)	ACTIVE	3	CHK	SA	С	20	O/C		FS-C	Q		
WEST ESSENTI	AL SERVICE WA	TER PUMP	DISCH	RGE S	STRAINER	OME	E-34W	1		FS-O	Q		
2-ESW-140	2-5113 (G6)	ACTIVE	3	GAT	MAN	В	1	0		FSE	2A		
EMERGENCY E	SW SUPPLY TO N VALVE	TDAFP VAL	/ES 2-V	VMO-7	53 & 2-ES	W-24	0						
2-ESW-141	2-5113 (E5)	ACTIVE	3	CHK	SA	С	6	С		BDT-C	R	·····	Condition Monitoring Program
EAST ESSENTIA	AL SERVICE WA CHECK VALVE	TER TO CD I	EMERG	ENCY	DIESEL H	EAT	•			FS-O	Q		
2-ESW-142	2-5113 (E6)	ACTIVE	3	CHK	SA	С	6	С		BDT-O	R		Condition Monitoring Program
WEST ESSENTI	AL SERVICE WA CHECK VALVE	ATER TO CD	EMERC	SENCY	DIESELH	HEAT				FS-C	R	ROJ - 007	
2-ESW-143	2-5113 (F6)	ACTIVE	3	CHK	SA	С	6	С		BDT-C	R		Condition Monitoring Program
WEST ESSENTI	AL SERVICE WA	TER TO AB	EMERC	BENCY	DIESELH	IEAT				FS-O	Q		
2-ESW-144	2-5113 (F5)	ACTIVE	3	CHK	SA	С	6	С		BDT-O	R		Condition Monitoring Program
EAST ESSENTIA	AL SERVICE WA CHECK VALVE	TER TO AB I	EMERG	ENCY	DIESEL H	EAT				FS-C	R	ROJ - 007	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code					Posit	ion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-ESW-145	2-5113 (G5)	ACTIVE	3	GAT	MAN	В	4	С		FSE	2A		
ESSENTIAL SER SHUTOFF VALV	VICE WATER TO	EAST MOT	OR DR	IVEN A	UXILIAR	FEE	D PU	MP					
2-ESW-146	2-5113 (G5)	ACTIVE	3	GAT	MAN	B	1	0		FSE	2A		
EMERGENCY E8 2-WMO-754 & 2-	SW SUPPLY TO E	EAST MOTO	r Driv	'EN AU	X FEED F	UMP	VAL	VES					
2-ESW-168N	2-5113 (B1)	ACTIVE	3	BTF	MAN	В	3	С		FSE	2A	<u> </u>	······································
ESSENTIAL SER CONDITIONING	VICE WATER TO UNIT HV-ACRA-1	CONTROL SHUTOFF	ROOM	VENT	NORTH A	IR							
2-ESW-168S	2-5113 (B9)	ACTIVE	3	BTF	MAN	В	3	С		FSE	2A		
ESSENTIAL SER CONDITIONING	VICE WATER TO UNIT HV-ACRA-2	CONTROL	ROOM	VENT	SOUTH A	IR							
2-ESW-169N	2-5113 (C2)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CONTROL ROOM	M A/C NORTH LIC HUTOFF VALVE		ER CON	NDENS	ER ESSE	NTIAI	_ SEF	RVICE					
2-ESW-169S	2-5113 (C9)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CONTROL ROOM	M A/C SOUTH LIC HUTOFF VALVE		ER CON	NDENS	ER ESSE	NTIAL	SEF	RVICE					
2-ESW-170N	2-5113 (D2)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CONTROL ROOM	M A/C NORTH LIC SHUTOFF VAL	QUID CHILL	ER COI	NDENS	ER ESSE	NTIAI	SEF	RVICE					·
2-ESW-170S	2-5113 (E9)	ACTIVE	3	BTF	MAN	В	3	0		FSE	2A		
CONTROL ROOM	M A/C SOUTH LIC SHUTOFF VAL	QUID CHILL		NDENS	ERESSE	NTIAL	SEF	RVICE					
2-ESW-171N	2-5113 (E1)	ACTIVE	3	BTF	MAN	В	3	С		FSE	2A		
CONTROL ROO SHUTOFF VALV	M VENT NORTH /	A/C UNIT H	/-ACRA	-1 EME	ERGENCY	'ESN		TLET					
2-ESW-171S	2-5113 (E9)	ACTIVE	3	BTF	MAN	В	3	С		FSE	2A		
CONTROL ROOM	M VENT SOUTH /		/-ACRA	-2 EME	ERGENCY	'ESW		LET					



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-ESW-240	2-5113 (G5)	ACTIVE	3	GAT	MAN	В	6	С		FSE	2A	-	
ESSENTIAL SER	VICE WATER TO) TURBINE I	DRIVEN		LIARY FEE	ED PL	JMP						
2-ESW-243	2-5113 (E2)	ACTIVE	3	GAT	MAN	В	4	С		FSE	2A		· ·
ESSENTIAL SER	VICE WATER TO	WEST MO	TOR DF	RIVEN	AUXILIAR	Y FE	ED Pl	JMP	,				
2-ESW-244	2-5113 (D2)	ACTIVE	3	GAT	MAN	B	1	0		FSE	2A		
EMERGENCY ES 2-WMO-744 & 2-I	SW SUPPLY TO Y ESW-243 TELLT	NEST MOTO	or dri' '	VEN AU	JX FEED	PUMI	P VAL	VES					
2-ESW-296	2-5113 (B1)	ACTIVE	3	GAT	MAN	В	3	С		FSE	2A		· · · · · · · · · · · · · · · · · · ·
EMERGENCY ES	SW SUPPLY TO	NORTH CRA	C AHU	2-HV-/	ACRA-1 S	HUTC		ALVE					
2-ESW-298	2-5113 (B9)	ACTIVE	3	GAT	MAN	В	3	С		FSE	2A		
EMERGENCY ES	SW SUPPLY TO	SOUTH CRA	C AHU	2-HV-/	ACRA-2 S	Ηυτα	OFF V	ALVE	·				
2-QP-56E	2-5113 (L2)	ACTIVE	0	VENT	r sa	С	0.5	С		FS-C	Q		
EAST CONTAIN	MENT SPRAY HE	AT EXCHAI	NGER H	IE-18E	SHELL SI	IDE V	ENT						
2-QP-56W	2-5113 (L5)	ACTIVE	0	VENT	r sa	С	0.5	С		FS-C	Q		
WEST CONTAIN VALVE	MENT SPRAY H	EAT EXCHA	NGER	HE-18V	V SHELL	SIDE	VENT	Г					
2-SV-14E	2-5113 (K2)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		Thermal relief
EAST CONTAINN	MENT SPRAY HE	AT EXCHAI	NGER H	IE-18E	SHELL S	IDE S	AFET	Y					
2-SV-14W	2-5113 (K6)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		Thermal relief
WEST CONTAIN	MENT SPRAY H	EAT EXCHA	NGER	HE-18V	V SHELL	SIDE	SAFE	TY					
2-SV-15E	2-5113 (J2)	ACTIVE	3	REL	SA	С	0.7	5 C		SVT	10A		Thermal relief
EAST COMPONE SAFETY VALVE	ENT COOLING W	ATER HEA	LEXCH	ANGE	R HE-15E	TUB	E SID	E			<u> </u>		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	. Fail.	Test	Freq	Dev.	Comments
2-SV-15W	2-5113 (H8)	ACTIVE	3	REL	SA	C	0.75	С		SVT	10A		Thermal relief
WEST COMPONI SAFETY VALVE	ENT COOLING W	ATER HEA	T EXCH	ANGE	R HE-15W	/ TUB	BE SID	θE					
2-SV-16-AB	2-5113A (E6)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		Thermal relief
AB EMERGENC	Y DIESEL JACKE R OUTLET SAFE	T WATER C TY VALVE	OOLEF	R QT-1:	31-AB ES	SENT	IAL						
2-SV-16-CD	2-5113A (E2)	ACTIVE	3	REL	SA	С	1	С		SVT	10A		Thermal relief
CD EMERGENCY SERVICE WATER	Y DIESEL JACKE R OUTLET SAFE	T WATER C TY VALVE	OOLEF	R QT-13	B1-CD ESS	SENT	IAL						
2-T-131-1	2-5113 (B3)	ACTIVE	3	VENT	SA	С	0.75	O/C		FS-C	Q		
EAST ESSENTIA BASKET AUTO V	L SERVICE WAT	ER PUMP D	ISCHA	RGE S	TRAINER	OME	-34E	EAST					
2-T-131-2	2-5113 (B3)	ACTIVE	3	VENT	SA	С	0.75	O/C		FS-C	Q		· · · · · · · · · · · · · · · · · · ·
EAST ESSENTIA WEST BASKET A	L SERVICE WAT	er pump d P	ISCHA	RGE S	TRAINER	OME	-34E						
2-T-131-3	2-5113 (B7)	ACTIVE	<u>,</u> 3	VENT	SA	С	0.75	O/C		FS-C	Q		
WEST ESSENTIA	AL SERVICE WAT UTO VENT TRAF	TER PUMP	DISCHA	ARGE S	STRAINER	OME	E-34W	1					
2-T-131-4	2-5113 (B7)	ACTIVE	3	VENT	SA	С	0.75	O/C		FS-C	Q		······
WEST ESSENTIA	AL SERVICE WAT	ter pump i P	DISCHA	ARGE S	STRAINER	OME	E-34W	1					
2-T-131-5	2-5113A (D8)	ACTIVE	3	VENT	SA	С	.75	O/C		FS-C	Q		
AB EMERGENCY	DIESEL NORTH	COMBUST	ION AIF	RAFTE	RCOOLE	r he	-47-AI	BN					
, 2-T-131-6	2-5113A (C7)	ACTIVE	3	VENT	SA	С	.75	O/C		FS-C	Q		•
AB EMERGENCY AUTO VENT TRA	DIESEL SOUTH	COMBUST	ION AIF	RAFTE	RCOOLE	R HE	-47-AI	BS					
2-T-131-7	2-5113A (D4)	ACTIVE	3	VENT	SA	С	.75	O/C		FS-C	Q		
CD EMERGENCY AUTO VENT TRA	/ DIESEL NORTH	I COMBUST			RCOOLE	R HE	-47-C	DN					· · · · · · · · · · · · · · · · · · ·

11



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-T-131-8	2-5113A (C2)	ACTIVE	3	VENT	SA	С	.75	O/C		FS-C	Q		
CD EMERGENCY AUTO VENT TRA	' DIESEL SOUTH P	COMBUST	ION AIF	R AFTE	RCOOLEI	R HE-	47-CI	DS			•		
2-WMO-703	2-5113 (D3)	ACTIVE	3	BTF	MO	B	20	O/C	AI	DIAG	54M	-, -:	
EAST ESSENTIA	L SERVICE WAT	ER PUMP P	P-7E D	ISCHA	RGE SHU	TOFF	VAL	VE		FSE	18M		OMN-1
2-WMO-704	2-5113 (D7)	ACTIVE	3	BTF	MO	В	20	O/C	AI	DIAG	54M	-	
WEST ESSENTIA	L SERVICE WAT	TER PUMP I	PP-7W	DISCH	ARGE SH	UTOF	F VA	LVE		FSE	18M		OMN-1
2-WMO-706	2-5113 (D7)	ACTIVE	3	BTF	MO	В	20	0	Al	DIAG	9A		
WEST ESSENTIA	AL SERVICE WAT	TER SUPPL	Y HEAD	DER CF			NIT 1			FSE	18M		OMN-1
2-WMO-708	2-5113 (D4)	ACTIVE	3	BTF	MO	В	20	0	Al	DIAG	9A		
EAST ESSENTIA	L SERVICE WAT	ER SUPPLY	HEAD	ER CR	OSSTIE T	O UN	IT 1			FSE	18M		OMN-1
2-WMO-712	2-5113 (H3)	PASSIVE	3	BTF	MO	В	12	0	AI	PIT	2A		
EAST CONTAINN	MENT SPRAY HE	AT EXCHAN	IGER H	E-18E	ESSENTI	AL SE	RVIC	E					
2-WMO-714	2-5113 (M3)	ACTIVE	3	BTF	MO	В	12	С	Al	DIAG	5A		
EAST CONTAINN	MENT SPRAY HE	AT EXCHAN /E	IGER H	E-18E	ESSENTI	AL SE	RVIC	E		FSE	18M		OMN-1
2-WMO-716	2-5113 (H7)	PASSIVE	3	BTF	MO	В	12	0	Al	PIT	2A		
WEST CONTAIN	MENT SPRAY HE VALVE	EAT EXCHA	NGER E	ESSEN	TIAL SER	VICE	WAT	ER					
,2-WMO-718	2-5113 (M7)	ACTIVE	3	BTF	MO	В	12	C	AI	DIAG	54M		
WEST CONTAIN	MENT SPRAY HE FF VALVE	EAT EXCHA	NGER E	ESSEN	TIAL SER	VICE	WAT	ER		FSE	18M		OMN-1
2-WMO-722	2-5113 (F6)	ACTIVE	3	BTF	MO	В	6	С	AI	DIAG	9A		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
WEST ESSENTIA	AL SERVICE WA (CHANGERS SH	TER SUPPL UTOFF VAL	Y HEAD	DER TO	AB EME	RGEN	ICY			FSE	18M		OMN-1



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

			Code					Posi	ion			Code		· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
2-WMO-724	2-5113 (F5)	ACTIVE	3	BTF	МО	В	6	С	Al	DIAG	6R			
EAST ESSENTIA	L SERVICE WA	TER SUPPLY VALVE	(HEAD	ER TO	AB EMER	RGEN	CYD	IESEL		FSE	18M		OMN-1	
2-WMO-726	2-5113 (E5)	ACTIVE	3	BTF	MO	В	6	С	Al	DIAG	9A			
EAST ESSENTIA	L SERVICE WA	TER SUPPLY	(HEAD VE	ER TO	CD EMER	RGEN	CY			FSE	18M		OMN-1	
2-WMO-728	2-5113 (E6)	ACTIVE	3	BTF	MO	В	6	С	ĀI	DIAG		_		
WEST ESSENTIA	AL SERVICE WA KCHANGERS SH	TER SUPPL	Y HEAD	DER TO	D CD EME	RGE	NCY		·	FSE	18M		OMN-1	
2-WMO-732	2-5113 (G1)	PASSIVE	3	BTF	MO	В	16	0	AI	PIT	2A	_		
EAST COMPONI	ENT COOLING V R INLET SHUTO	VATER HEAT	EXCH	ANGE	R HE-15E	ESSE	INTIA	L,						
2-WMO-734	2-5113 (G2)	ACTIVE	3	BTF	MO	В	16	O/C	AI	DIAG	54M			
EAST COMPONI	ENT COOLING V R OUTLET SHU	VATER HEAT	EXCH	ANGE	r he-15e	ESSE	ENTIA	L.		FSE	18M		OMN-1	
2-WMO-736	2-5113 (G8)	PASSIVE	3	BTF	MO	В	16	0	AI	PIT	2A	·····		
WEST COMPON	ENT COOLING	WATER HEA	TEXCH	IANGE	R ESSEN	TIAL	SER	/ICE						
2-WMO-738	2-5113 (G8)	ACTIVE	3	BTF	MO	В	16	O/C	AI	DIAG	54M			
WEST COMPON	ENT COOLING	WATER HEA VE	TEXCH	IANGE	R ESSEN	TIAL	SER\	/ICE		FSE	18M		OMN-1	
2-WMO-744	2-5113 (D2)	ACTIVE	3	GAT	MO	В	4	С	Al	DIAG	9A			
ESSENTIAL SEF	RVICE WATER T	O WEST MO	TOR DI	RIVEN	AUXILIAR	YFE	ED P	UMP		FSE	18M		OMN-1	
2-WMO-753	2-5113 (H5)	ACTIVE	3	BTF	MO	В	6	С	AI	DIAG	9A	·	,	· · · · · · · · · · · · · · · · · · ·
	SSENTIAL SERV	ICE WATER	SUPPL	Y TO '	tdafp pp	-4 SH	IUTO	FF		FSE	18M		OMN-1	
2-WMO-754	2-5113 (H5)	ACTIVE	3	BTF	MO	В	4	С	Al	DIAG	9A			
ESSENTIAL SEF	RVICE WATER T	O EAST MOT	FOR DR	RIVEN /	AUXILIAR	YFEE	ED PL	JMP		FSE	18M		OMN-1	
Revision 4														13



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WRV-722	2-5113A (B4)	ACTIVE	3	3W	AO	В	4	0	0	FSE	Q		Skid Mounted
CD EMERGENC	Y DIESEL NORTH PASS VALVE	I COMBUST	TON AIF		RCOOLE	r he	-47-C	DN					
2-WRV-724	2-5113A (A2)	ACTIVE	3	3W	AO	В	4	0	0	FSE	Q		Skid Mounted
CD EMERGENC	Y DIESEL SOUTH PASS VALVE	COMBUST	'ION AIF	R AFTE	RCOOLE	r He	-47-C	DS					
2-WRV-726	2-5113A (B9)	ACTIVE	3	3W	AO	В	4	0	0	FSE	Q		Skid Mounted
AB EMERGENC ESW INLET/BYR	Y DIESEL NORTH PASS VALVE	I COMBUST	ION AIF	RAFTE	RCOOLE	R HE	-4 7-Al	BN					
2-WRV-728	2-5113A (A7)	ACTIVE	3	3W	AÖ	В	4	0	0	FSE	Q		Skid Mounted
AB EMERGENC ESW INLET/BY	Y DIESEL SOUTH PASS VALVE	I COMBUST	ION AIF	R AFTE	RCOOLEI	R HE-	47- AI	BS					
2-WRV-763	2-5113 (C4)	ACTIVE	3	GLB	AO	В	6	0/C	C	FSE	Q		
EAST ESSENTI	AL SERVICE WAT	ER PUMP F	PP-7E D	ISCHA	RGE STR	AINE	R EA	ST		FST	Q		
BASKET BACKV	VASH OUTLET SH	HUTOFF VA	LVE							ST-C	Q		
	<u> </u>									ST-O	Q		
2-WRV-764	2-5113 (C8)	ACTIVE	3	GLB	AO	В	6	O/C	С	FSE	Q		
WEST ESSENT	IAL SERVICE WA	TER PUMP	PP-7W	DISCH	IARGE ST	RAIN	ER W	/EST		FST	Q		
BASKET BACK	VASH OUTLET SI	HUTOFF VA	LVE							ST-C	Q		
	······································									ST-O	Q		· · · · · · · · · · · · · · · · · · ·
2-WRV-768	2-5113 (C3)	ACTIVE	3	BALI	AO	В	4	O/C	С	FSE	Q		
EAST ESSENTI	AL SERVICE WAT	ER PUMP P	P-7W (DISCH	ARGE STF	RAINE	ER W	EST		FST	Q		
BASKET BACK	VASH INLET SHU	TOFF VALV	Æ							ST-C	Q		
•	•									ST-O	Q		
2-WRV-769	2-5113 (C6)	ACTIVE	3	BALI	- AO	В	4	0/C	_C	FSE	Q		
WESTESSENT	IAL SERVICE WA	TER PUMP	PP-7W	DISCH	IARGE ST	RAIN	ER W	/EST		FST	Q		
BASKET BACK	VASH INLET SHU	TOFF VALV	/E							ST-C	Q		
							<i></i>			ST-O	Q		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ESW - Essential Service Water

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			Code					Posi	tion		· · · · · · · · · · · · · · · · · · ·	Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WRV-773	2-5113 (C4)	ACTIVE	3	GLB	AO	В	6	O/C	С	FSE	Q		
EAST ESSENTIA	L SERVICE WAT	FER PUMP F	P-7E D	ISCHA	RGF STR			ST		FST	Q		
BASKET BACKW	VASH OUTLET S	HUTOFF VA	LVE							ST-C	Q		
	,									ST-O	Q		
2-WRV-774	2-5113 (C8)	ACTIVE	3	GLB	AO	В	6	O/C	С	FSE	Q		
WEST ESSENTI	AL SERVICE WA		PP-7W	DISCH	ARGE ST	RAIN		AST		FST	Q		
BASKET BACKW	VASH OUTLET S	HUTOFF VA	LVE	2.001						ST-C	Q		
										ST-O	Q		
2-WRV-778	2-5113 (C3)	ACTIVE	3	BALL	. AO	В	4	O/C	С	FSE	Q	······	······································
EAST ESSENTIA	L SERVICE WA		P-7F D	ISCHA	RGF STR			ST		FST	Q		
BASKET BACKW	VASH INLET SHU	JTOFF VALV	Έ							ST-C	Q		
										ST-O	Q		
2-WRV-779	2-5113 (C7)	ACTIVE	3	BALL	. AO	В	4	O/C	С	FSE	Q	uffant.	
WEST ESSENTI	AL SERVICE WA		PP-7W	DISCH	ARGE ST	RAINI	ER F/	AST		FST	Q		
BASKET BACKV	VASH INLET SHU	JTOFF VALV	Έ							ST-C	Q		
	· · · · · · · · · · · · · · · · · · ·									ST-O	Q		

Revision 4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: FW - Feedwater

	· · · · · · · · · · · · · · · · · · ·		Code		· · ·			Posi	tion	······································		Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CF-126	1-5105D (J4)	ACTIVE	2	СНК	SA	С	0.5	O/C		BDT-O	С		BDT-O is satisfied by Normal Ops
FEEDWATER C	CHEMICAL FEED T ECK VALVE	O STEAM O	GENERA	TOR #	2 CONTA	INME	NT			FS-C	С	CSJ - 032	
1-CF-127	1-5105D (J8)	ACTIVE	2	CHK	SA	С	0.5	O/C		BDT-O	С		BDT-O is satisfied by Normal Ops
FEEDWATER O	CHEMICAL FEED T ECK VALVE	O STEAM O	BENERA	TOR #	3 CONTA	INME	NT			FS-C	С	CSJ - 032	
1-CF-128	1-5105D (C9)	ACTIVE	2	CHK	SA	С	0.5	O/C		BDT-O	С		BDT-O is satisfied by Normal Ops
FEEDWATER C	CHEMICAL FEED T IECK VALVE	O STEAM O	BENERA	TOR #	4 CONTA	INME	NT			FS-C	C	CSJ - 032	
1-CF-129	1-5105D (D4)	ACTIVE	2	CHK	SA	С	0.5	O/C		BDT-O	С		BDT-O is satisfied by Normal Ops
FEEDWATER C	CHEMICAL FEED 1 IECK VALVE	O STEAM G	GENER	ATOR #	1 CONTA	INME	NT			FS-C	С	CSJ - 032	
1-FMO-201	1-5106 (F5)	ACTIVE	0	GAT	MO	В	14	0	Â	FSE	С	CSJ - 037	OMN-1
STEAM GENER	RATOR OME-3-1 F	EEDWATER	SHUT	OFF VA	LVE					DIAG	2R		
1-FMO-202	1-5106 (E9)	ACTIVE	0	GAT	MO	В	14	0	AI	FSE	С	CSJ - 037	OMN-1
STEAM GENER	RATOR OME-3-2 F	EEDWATER	SHUT	off va	LVE					DIAG	2R		
1-FMO-203	1-5106 (F9)	ACTIVE	0	GAT	MO	B	14	0	AI	FSE	С	CSJ - 037	OMN-1
STEAM GENER	RATOR OME-3-3 F	EEDWATER	SHUT	off va	LVE					DIAG	2R		
1-FMO-204	1-5106 (G5)	ACTIVE	0	GAT	MO	В	14	0	AI	FSE	C	CSJ - 037	OMN-1
STEAM GENER	RATOR OME-3-4 F	EEDWATER	SHUT	OFF VA	LVE					DIAG	2R		
1-FRV-210	1-5106 (F5)	ACTIVE	0	ANG	AO	В	14	0	С	FSE	С	CSJ - 015	
STEAM GENER	RATOR OME-3-1 F	EEDWATER			G VALVE					FST (Tm A)	С	CSJ - 015	Train A
										FST (Trn B)	С	CSJ - 015	Train B
										ST-C (Trn A)	С	CSJ - 015	Train A
										ST-C (Tm B)	С	CSJ - 015	Train B
										PIT	2A		

1



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: FW - Feedwater

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-FRV-220	1-5106 (E9)	ACTIVE	0	ANG	AO	В	14	0	С	FSE	С	CSJ - 015	
STEAM GENERA	TOR OME-3-2 FE	EDWATER	REGU							FST (Tm A)	С	CSJ - 015	Train A
										FST (Trn B)	С	CSJ - 015	Train B
				•						ST-C (Trn A)	С	CSJ - 015	Train A
										ST-C (Trn B)	С	CSJ - 015	Train B
										PIT	2A		
1-FRV-230	1-5106 (G9)	ACTIVE	0	ANG	AO	В	14	0	С	FSE	С	CSJ - 015	
STEAM GENERA	TOR OME-3-3 FE	EEDWATER	REGU	LATING						FST (Trn A)	С	CSJ - 015	Train A
										FST (Tm B)	С	CSJ - 015	Train B
			. '	· •						ST-C (Trn A)	С	CSJ - 015	Train A
										ST-C (Trn B)	С	CSJ - 015	Train B
										PIT	2A		
1-FRV-240	1-5106 (G5)	ACTIVE	0	ANG	ÂÔ	В	14	0	С	FSE	С	CSJ - 015	
STEAM GENERA	TOR OME-3-4 F	EEDWATER	REGU							FST (Tm A)	С	CSJ - 015	Train A
										FST (Tm B)	С	CSJ - 015	Train B
i										ST-C (Trn A)	С	CSJ - 015	Train A
										ST-C (Trn B)	С	CSJ - 015	Train B
										PIT	2A		
1-FW-118-1	1-5105D (C4)	ACTIVE	2	CHK	SA	C	14	O/C		FS-C	R	ROJ - 033	Condition Monitoring Program
FEEDWATER TO VALVE	STEAM GENER	ATOR #1 C	ONTAIN	IMENT	ISOLATIC	ON CH	IECK	•		BDT-O	Q		BDT-O satisfied by Normal Ops
1-FW-118-2	1-5105D (J4)	ACTIVE	2	CHK	SA	С	14	O/C		FS-C	R	ROJ - 033	Condition Monitoring Program
FEEDWATER TO	STEAM GENER	ATOR #2 C	ONTAIN	IMENT	ISOLATIC	ON CH	IECK			BDT-O	Q		BDT-O satisfied by Normal Ops
1-FW-118-3	1-5105D (K8)	ACTIVE	2	CHK	SA	С	14	O/C		FS-C	R	ROJ - 033	Condition Monitoring Program
FEEDWATER TO	STEAM GENER	ATOR #3 C	ONTAIN	IMENT	ISOLATIC	ON CH	IECK			BDT-O	Q	·	BDT-O satisfied by Normal Ops
1-FW-118-4	1-5105D (B9)	ACTIVE	2	CHK	SA	С	14	O/C		FS-C	R	ROJ - 033	Condition Monitoring Program
FEEDWATER TO VALVE	STEAM GENER	ATOR #4 C	ONTAIN	MENT	ISOLATIC	DN CH	IECK			BDT-O	Q		BDT-O satisfied by Normal Ops



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: FW - Feedwater

			Code		,			Posi	tion			Code	
Component	PiD(Coord)	Function	Cla s s	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-CF-126	2-5105D (J8)	ACTIVE	2	СНК	SA	С	0.5	O/C		BDT-O	С		BDT-O is satisfied by normal Ops
FEEDWATER C	HEMICAL FEED T	O STEAM G	SENER/	TOR #	2 CONTA	INME	NT			FS-C	C	CSJ - 032	
2-CF-127	2-5105D (J4)	ACTIVE	2	CHK	SA	С	0.5	O/C		BDT-O	С		BDT-O is satisfied by normal Ops
FEEDWATER C	HEMICAL FEED T	O STEAM G	SENER/	TOR #	3 CONTA	INME	NT			FS-C	С	CSJ - 032	
2-CF-128	2-5105D (D4)	ACTIVE	2	CHK	SA	С	0.5	O/C		BDT-O	C		BDT-O is satisfied by normal Ops
FEEDWATER C	HEMICAL FEED T	O STEAM O	BENER/	ATOR #	4 CONTA	INME	NT			FS-C	С	CSJ - 032	
2-CF-129	2-5105D (C8)	ACTIVE	2	CHK	SA	С	0.5	O/C		BDT-O	С		BDT-O is satisfied by normal Ops
FEEDWATER C	HEMICAL FEED 1 ECK VALVE	O STEAM O	SENER/	TOR #	#1 CONTA	INME	NT			FS-C	С	CSJ - 032	
2-FMO-201	2-5106 (F5)	ACTIVE	0	GAT	MO	В	14	0	AI	FSE	С	CSJ - 037	OMN-1
STEAM GENER	ATOR OME-3-1 F	EEDWATER	SHUT	OFF VA	ALVE					DIAG	2R		
2-FMO-202	2-5106 (E9)	ACTIVE	0	GAT	MO	В	14	0	Al	FSE	С	CSJ - 037	OMN-1
STEAM GENER	ATOR OME-3-2 F	EEDWATER	SHUT	off V/	ALVE					DIAG	2R		
2-FMO-203	2-5106 (F9)	ACTIVE	0	GAT	MO	В	14	0	AI	FSE	С	CSJ - 037	OMN-1
STEAM GENER	ATOR OME-3-3 F	EEDWATER	SHUT	off V/	ALVE					DIAG	2R		
2-FMO-204	2-5106 (H5)	ACTIVE	0	GAT	MO	В	14	0	AI	FSE	С	CSJ - 037	OMN-1
STEAM GENER	RATOR OME-3-4 F	EEDWATER	SHUT	off V/	ALVE					DIAG	2R		
2-FRV-210	2-5106 (G5)	ACTIVE	0	ANG	AO	В	14	0	С	FSE	С	CSJ - 015	
STEAM GENER	ATOR OME-3-1 E		PEGU	ΙΔΤΙΝΙ						FST (Tm A)	С	CSJ - 015	Train A
			INLOU							FST (Tm B)	С	CSJ - 015	Train B
•										ST-C (Trn A)	С	CSJ - 015	Train A
										ST-C (Tm B)	С	CSJ - 015	Train B
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: FW - Feedwater

······································			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-FRV-220	2-5106 (E9)	ACTIVE	0	ANG	AO	В	14	0	С	FSE	С	CSJ - 015	
STEAM GENER	ATOR OME-3-2 FE	EDWATER	REGU							FST (Trn A)	С	CSJ - 015	Train A
•••••••••••••••••••••••••••••••••••••••										FST (Trn B)	C	CSJ - 015	Train B
										ST-C (Trn A)	С	CSJ - 015	Train A
										ST-C (Trn B)	Ċ	CSJ - 015	Train B
										PIT	2A		
2-FRV-230	2-5106 (F9)	ACTIVE	0	ANG	AO	В	14	0	С	FSE	C.	CSJ - 015	
STEAM GENER	ATOR OME-3-3 FE	FDWATER	REGU		S VALVE					FST (Tm A)	С	CSJ - 015	Train A
0.2										FST (Trn B)	С	CSJ - 015	Train B
										ST-C (Trn A)	С	CSJ - 015	Train A
										ST-C (Trn B)	С	CSJ - 015	Train B
										PIT	2A		
2-FRV-240	2-5106 (H5)	ACTIVE	0	ANG	AO	В	14	0	С	FSE	C	CSJ - 015	· · · · · · · · · · · · · · · · · · ·
STEAM GENER	ATOR OME-3-4 FF	FDWATER	REGU		WALVE					FST (Trn A)	С	CSJ - 015	Train A
										FST (Trn B)	С	CSJ - 015	Train B
										ST-C (Trn A)	C	CSJ - 015	Train A
		to the transmission of the second								ST-C (Trn B)	С	CSJ - 015	Train B
	· · · ·			·. · ·						PIT	2A		
2-FW-118-1	2-5105D (C8)	ACTIVE	2	CHK	SA	С	14	O/C		FS-C	R	ROJ - 033	Condition Monitoring Program
FEEDWATER T	O STEAM GENER	ATOR #1 CO	ONTAIN	MENT	ISOLATIC	ON CH	IECK			BDT-O	Q		BDT-O satisfied by normal Ops
2-FW-118-2	2-5105D (K8)	ACTIVE	2	CHK	SA	С	14	O/C		FS-C	R	ROJ - 033	Condition Monitoring Program
FEEDWATER T	O STĘAM GENER/	ATOR #2 CO	ONTAIN	MENT	ISOLATIC	DN CH	HECK			BDT-O	Q		BDT-O satisfied by normal Ops
2-FW-118-3	2-5105D (K3)	ACTIVE		CHK	SA	С	14	O/C		FS-C	R	ROJ - 033	Condition Monitoring Program
FEEDWATER T	O STEAM GENER	ATOR #3 CO	ONTAIN	MENT	ISOLATIC	ON CH	HECK			BDT-O	Q		BDT-O satisfied by normal Ops
2-FW-118-4	2-5105D (C3)	ACTIVE	2	СНК	SA	С	14	O/Ĉ		FS-C	R	ROJ - 033	Condition Monitoring Program
FEEDWATER T VALVE	O STEAM GENER	ATOR #4 CO		IMENT	ISOLATIC	DN CH	IECK			BDT-O	Q		BDT-O satisfied by normal Ops



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ICR - Ice Condenser Refrigeration

	Code								tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-R-156	1-5146B (L4)	ACTIVE	2	СНК	SA	AC	0.38	0		FS-C	R	ROJ - 008	Condition Monitoring Program
ICE CONDENSE	REFRIGERATIO		SUPPI	Y HE		MT I	SOL			LJ	R		
VALVES PRESS	RELIEF HEADER	CHECK VA					001			FS-O	Q		
1-R-157	1-5146B (L6)	ACTIVE	2	CHK	SA	AC	0.38	0		FS-C	R	ROJ - 008	Condition Monitoring Program
ICE CONDENSE		ON GLYCOL	RETU	RN HE		тмт і	SOL			ĹĴ	R		
VALVES PRESS	RELIEF HEADER	CHECK VA								FS-O	Q		
1-VCR-10	1-5146B (M5)	ACTIVE	2	DIA	AO	A	4	0	С	FSE	Q	· · · ·	
ICE CONDENSE			SUPP	Y HE						FST	Q		
CONTAINMENT	SOLATION VALV	Ë								ST-C	Q		
										IJ	OPB		
										PIT	2A		
1-VCR-11	1-5146B (L5)	ACTIVE	2	DIA	AO	Α	4	0	С	FSE	Q		, <u>,,,,,,,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			SUPP				•			FST	Q		
CONTAINMENT	SOLATION VALV	E								ST-C	Q		
										LJ	OPB		
										PIT	2 A.		
1-VCR-20	1-5146B (M7)	ACTIVE	2	DIA	AO	A	4	0	С	FSE	Q		
ICE CONDENSE	R REERIGERATI	ON GLYCOL	RETU	RN HF	ADER TR	ÁIN 'A	. '			FST	Q		
CONTAINMENT	ISOLATION VALV	/E					•			ST-C	Q		
										LJ .	OPB		
										PIT	2A		
1-VCR-21	1-5146B (L7)	ACTIVE	2	DIA	AO	Α	4	0	С	FSE	Q		
ICE CONDENSE		ON GLYCOI	RETU	RN HF	ADER TR	AIN 'F	יצ			FST	Q.		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
										IJ	OPB		
e 41										PIT	2A		
2-R-156	2-5146B (L4)	ACTIVE	2	СНК	SA	AC	0.38	3 0		FS-C	R	ROJ - 008	Condition Monitoring Program
ICE CONDENSE	R REFRIGERATI	ON GLYCO		LY HE	ADER CN	тмт і	SOL			LJ	R		
VALVES PRESS	RELIEF HEADEF	CHECK V	ALVE							FS-O	Q		

1



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: ICR - Ice Condenser Refrigeration

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-R-157	2-5146B (L6)	ACTIVE	2	СНК	SA	AC	0.38	0		FS-C	R	ROJ - 008	Condition Monitoring Program
ICE CONDENS	FR REFRIGERATI	ON GLYCOL	RETUR		ADFR CN	тмт і	SOL			LJ	R		
VALVES PRES	S RELIEF HEADEF	R CHECK VA					002			FS-O	Q		· · · · · · · · · · · · · · · · · · ·
2-VCR-10	2-5146B (M5)	ACTIVE	2	DIA	AO	A	4	0	С	FSE	Q		en e
ICE CONDENS	FR RFFRIGERATI	ON GLYCOL	SUPPI	Y HEA			,			FST	Q		
CONTAINMEN	FISOLATION VALV	/E								ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-VCR-11	2-5146B (L5)	ACTIVE	2	DIA	AO	Α	4	0	С	FSE	Q		
ICE CONDENS	FR REFRIGERATI	ON GI YCOI	SUPP	Y HEA			,			FST	Q		
CONTAINMEN	T ISOLATION VAL	/E								ST-C	Q		
										IJ	OPB		
		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -								PIT	2A		
2-VCR-20	2-5146B (M7)	ACTIVE	2	DIA	AO	A	4	0	C	FSE	Q		
ICE CONDENS	ER VENTILATION	GLYCOL SL	IPPI Y I			'A'				FST	Q		
CONTAINMEN	T ISOLATION VAL	VE				••				ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-VCR-21	2-5146B (L7)	ACTIVE	2	DIA	AO	A	4	0	C	FSE	Q		
ICE CONDENS	FR REFRIGERATI	ON GLYCOL	RETU	RN HE		AIN 'F	ľ			FST	Q		
CONTAINMEN	T ISOLATION VAL	VE					•			ST-C	Q		
								÷		ĹJ	OPB		
										PIT	2A		

4 4 1



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MPW - Primary & Makeup Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-NCR-252	1-5128A (B9)	ACTIVE	2	GLB	AO	Α	3	O/C	С	FSE	Q		
PRIMARY WATE	R TO RCP SEAL	WATER MA			RESSURIZ	'FR F		F		FST	Q		
TANK CNTMT IS	OLATION VALVE				120001112					ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-PW-275	1-5128A (C9)	ACTIVE	2	CHK	SA	AC	3	O/C		FS-C	R	ROJ - 010	Condition Monitoring Program
PRIMARY WATE	R TO RCP SEAL	WATER MA			7R REI IEF		ik			LJ	R		
CONTAINMENT	ISOLATION CHEC	CK VALVE				17.0	•• •			FS-O	Q		GL 96-06
1-QCR-919	12-5115D (D6)	ACTIVE	2	DIA	AO	Α	2	С	С	FSE	Q		
DEMINERALIZEI	WATER TO CO		T SERV	ICES T	RAIN 'A' C	ONT		FNT		FST	Q		
ISOLATION VAL	VE		02.00				/			ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-QCR-920	12-5115D (D6)	ACTIVE	2	DIA	AO	Α	2	С	С	FSE	Q	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
DEMINERALIZEI	WATER TO CO		T SERV	ICES T	RAIN 'B' (ONT	AINM	FNT		FST	Q		
ISOLATION VAL	VE									ST-C	Q		
	•									LJ	OPB		
										PIT	2A		
2-NCR-252	2-5128A (B9)	ACTIVE	2	GLB	AO	Α	3	O/C	С	FSE	Q		
PRIMARY WATE	R TO RCP SEAL		KEUP	AND PI	RESSURIZ		RELIE	F		FST	Q		
TANK CNTMT IS	OLATION VALVE							-		ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-PW-275	2-5128A (C9)	ACTIVE	2	CHK	SA	AC	3	O/C		FS-C	R	ROJ - 010	Condition Monitoring Program
PRIMARY WATE	R TO RCP SEAL	WATER MA	KEUP	AND P	ZR RELIEI		IK			LJ	R		
CONTAINMENT	ISOLATION CHE	CK VALVE								FS-O	Q		GL 96-06

Units 1 & 2



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MPW - Primary & Makeup Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-QCR-919	12-5115D (D6)	ACTIVE	2	DIA	AO	Α	2	С	С	FSE	Q		
	WATER TO CON		r serv	ICES T	RAIN 'A' C	ONT	AINM	FNT		FST	Q		
ISOLATION VALV	/E									ST-C	Q		
										IJ	OPB		
										PIT	2A		
2-QCR-920	12-5115D (D6)	ACTIVE	2	DIA	AO	A	2	С	С	FSE	Q	·····	
DEMINERALIZED	WATER TO COM		T SFRV	ICES 1	RAIN 'B' (ONT		FNT		FST	Q		
ISOLATION VALV	/E	· · · · · · · · ·		10201						ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-SV-338	2-5128A (C8)	ACTIVE	0	REL	SA	C	.75	С		SVT	10A		GL 96-06
PRIMARY WATER TANK SAFETY V	R TO RCP SEAL V ALVE	WATER MA	KEUP	and P	RESSURIZ	ZER F	RELIE	F					
2-SV-339	12-5115D (C6)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06
DEMINERALIZED	WATER TO CON	NTAINMEN	T SERV	ICES S	SAFETY V	ALVE							

2



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

			Code		·····			Posi	tion	<u></u>		Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-DCR-310	1-5105 (D4)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q		
STEAM GENER	ATOR OME-3-1 BL		CONTA	INME	NT ISOLAT		VALV	Ē		FST	Q		
								_		ST-C	Q		
										PIT	2A		
1-DCR-320	1-5105 (D5)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q		
STEAM GENER	ATOR OME-3-2 BL		CONTA	INME			VALV	Έ		FST.	Q		
•••••••••••••••••••••••••••••••••••••••			••••					-		ST-C	Q		
										PIT	2A		
1-DCR-330	1-5105 (D5)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q		
STEAM GENER	ATOR OME-3-3 BL		CONT					۲E		FST	Q		
								-		ST-C	Q.		
					· .					PIT	2A		
1-DCR-340	1-5105 (D5)	ACTIVE	2	GLB	AO	В	2	-0/C	C	FSE	Q		· · · · · · · · · · · · · · · · · · ·
STEAM GENER	ATOR OME-3-4 BI	OWDOWN	CONTA		NT ISOLAT			۲E		FST	Q		
••••••••••••••••			••••							ST-C	Q		
										PIT	2A		
1-MCM-221	1-5105D (K4)	ACTIVE	2	GAT	MO	В	4	0	ÂI	DIAG	1R		
MAIN STEAM LE	ead #2 to auxili	ARY FEED	PUMP 1	FURBI	NE SHUTC	DFF V	ALVE			FSE	18M		OMN-1
1-MCM-231	1-5105D (K4)	ACTIVE	2	GAT	MO	В	4	0	Al	DIAG	1R		
MAIN STEAM LE	EAD #3 TO AUXILI	ARY FEED	PUMP 1	FURBI	NE SHUTC	off v	ALVE	•		FSE	18M		OMN-1
1-MMO-210	1-5105D (A-2)	PASSIVE	2	- 3W	MO	В	4	0	AI	PIT	2A	· · · · · · · · · · · · · · · · · · ·	
STEAM STOP V	ALVE MRV-210 S	TEAM CYLII	NDER D	UMP \	ALVES S	ELEC	TOR						
1-MMQ-220	1-5105D (M-2)	PASSIVE	2	3W	MO	В	4	0	AI	PIT	2A		······································
STEAM STOP V	ALVE MRV-220 S	TEAM CYLII	NDER D		ALVES S	ELEC	TOR						



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

		••••	Code	·				Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-MMO-230	1-5105D (M-6)	PASSIVE	2	3W	MO	В	4	0	AI	PIT	2A		· · · · · · · · · · · · · · · · · · ·
STEAM STOP V	ALVE MRV-230 ST	FEAM CYLIN	NDER D	UMP \	ALVES S	ELEC	TOR						
1-MMO-240	1-5105D (A-6)	PASSIVE	2	3W	MO	В	4	0 ·	AI	PIT	2A		······································
STEAM STOP V	ALVE MRV-240 S	FEAM CYLI	NDER D	UMP \	ALVES S	ELEC	TOR						
1-MRV-210	1-5105D (B3)	ACTIVE	2	GAT	HYD	B	28	0	С	FSE	С	CSJ - 017	· · · · · · · · · · · · · · · · · · ·
STEAM GENER	ATOR OME-3-1 ST									FST	Ċ	CSJ - 017	
										ST-C	С	CSJ - 017	
										PIT	2A		
1-MRV-211	1-5105D (A1)	ACTIVE	2	ANG	AO	В	2	C	0	FSE	Q		
STEAM GENER	ATOR #1 STOP V	ALVE MRV-	210 ST	EAM C	YLINDER .	TRAIN	N 'A' E	DUMP		FST	Q	·	
VALVE										ST-O	Q		
										PIT	2A		
1-MRV-212	1-5105D (A1)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		
STEAM GENER	ATOR #1 STOP V	ALVE MRV-	210 ST		YLINDER '	TRAI	N 'B' C	DUMP		FST	Q		
VALVE										ST-O	Q		
										PIT	2A		
1-MRV-213	1-5105D (C2)	ACTIVE	2	POR	AO V	В	6	0/C	С	PIT	2A		
STEAM GENER	ATOR OME-3-1 PO	OWER OPE	RATED	RELIE						FSE	18M		
										FST	18M	REL - 001	
										ST-C	18M		
	•									ST-O	18M		
1-MRV-220	1-5105D (L3)	ACTIVE	2	GAT	HYD	В	28	0	С	FSE	С	CSJ - 017	
STEAM GENER	ATOR OME-3-2 ST									FST	С	CSJ - 017	
c(d)					•					ST-C	С	CSJ - 017	
			•							PIT	2A		

Revision 4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

			Code					Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments	
1-MRV-221	1-5105D (M1)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		· · ·	
STEAM GENER	ATOR #2 STOP V	AI VE MRV-	220 STI				ח ימי ו	HIMP		FST	Q			
VALVE						i i v ui				ST-O	Q			
										PIT	2A			
1-MRV-222	1-5105D (M1)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		 	
STEAM GENER	ATOR #2 STOP V		220 STI				ח יפי ו			FST	Q			
VALVE			2001							ST-O	Q			
										PIT	2A			
1-MRV-223	1-5105D (K2)	ACTIVE	2	PORV	AO	В	6	O/C	С	PIT	2A		 - p 40	, , , , , , , , , , , , , , , , , , ,
STEAM GENER	ATOR OME-3-2 PC							•		FSE	18M			
OTEAM OLNER										FST	18M	REL - 001		
										ST-C	18M			
										ST-O	18M			
1-MRV-230	1-5105D (L7)	ACTIVE	2	GAT	HYD	В	28	0	C	FSE	C	CSJ - 017	· · · · · · · · · · · · · · · · · · ·	
STEAM GENER	ATOR OME-3-3 ST									FST	Ċ	CSJ - 017		
										ST-C	С	CSJ - 017		
										PIT .	2A			
1-MRV-231	1-5105D (M5)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q			· . · · ·
STEAM GENER	ATOR #3 STOP V		230 STI				ח ימי וו			FST	Q			
VALVE			200 011			110/10				ST-O	Q			
										PIT	2A			
1-MRV-232	1-5105D (M5)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q			
STEAM GENER	ATOR #3 STOP V		230 STI	AM C			יאי א			FST	Q			
VALVE	· · · ·		200 011							ST-O	Q			
	·									PIT	2A			
1-MRV-233	1-5105D (K7)	ACTIVE	2	PORV	AO	В	6	O/C	С	PIT	2A			
STEAM GENER	ATOR OME-3-3 PO		RATED	RELIE						FSE	18M			
		ur ir nast.turi ka		و الما جور ب	• • • / \tas • •					FST	18M	REL - 001		
										ST-C	18M			
										ST-O	18M			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

	CONTRACTOR AND A DR. 19 COM AND A DR.		Code					Posi	tion	· · · ·		Code	·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freg	Dev.	Comments
1-MRV-240	1-5105D (B7)	ACTIVE	2	GAT	HYD	В	28	0	С	FSE	С	CSJ - 017	
STEAM GENERA	TOR OME-3-4 ST	OP VALVE								FST	С	CSJ - 017	
										ST-C	C	CSJ - 017	
									· ·	PIT	2A		
1-MRV-241	1-5105D (A5)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		
STEAM GENERA	TOR #4 STOP V	ALVE MRV-2	240 STE		YLINDER -	TRAIN	N 'A' E	DUMP		FST	Q		
VALVE										ST-O	Q		
										PIT	2A		· · · · ·
1-MRV-242	1-5105D (A5)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		· · · · · · · · · · · · · · · · · · ·
STEAM GENERA	TOR #4 STOP V	ALVE MRV-2	240 ST	EAM C	YLINDER -	TRAIN	N 'B' E	DUMP		FST	Q		
VALVE							•	•••••		ST-O	Q		
										PIT	2A		
1-MRV-243	1-5105D (C7)	ACTIVE	2	POR\	AO	В	6	O/C	С	PIT	2A		
STEAM GENERA	TOR OME-3-4 PO		RATED	RELIE						FSE	18M		
								•		FST	18M	REL - 001	
		1			1					ST-C	18M		
										ST-O	18M		
1-MS-108-2	1-5105D (K4)	ACTIVE	3	CHK	SA	С	4	0/C		FS-C	С		· · · · · · · · · · · · · · · · · · ·
STEAM GENERA CHECK VALVE	TOR OME-3-2 S	FEAM TO AU	JXILIAF	RY FEE	D PUMP 1	TURB	INE			FS-O	С	CSJ - 016	
1-MS-108-3	1-5105D (K4)	ACTIVE	3	CHK	SA	С	4	O/C		FS-C	С		
STEAM GENERA CHECK VALVE	TOR OME-3-3 S	TEAM TO A	JXILIAF	RY FEE	D PUMP	furb	INE			FS-O	C	CSJ - 016	
1-QT-506	1-5105E (L8)	ACTIVE	3	THR	MO	В	4	С	AI	DIAG	3R		
	N AUXILIARY FE	ed pump p	P-4 TR	ip and	THROTT	LE V/	ALVE			FSE	18M		OMN-1
1-QT-507	1-5105E (L8)	ACTIVE	3	GOV	HYD	В	4	С		FSE	Q		Skid Mounted
AUXILIARY FEED) PUMP TURBINI	E GOVERNO	OR VAL	VE									



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS	- Main Steam									· •		·
Component	PID(Coord)	Function	Code Class	Туре	Actuator	Cat.	Size	Position Norm. Fail.	Test	Freq	Code Dev.	Comments
1-SV-1A-1	1-5105D (C1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-1 SA	AFETY VAL	VE 1A									
1-SV-1A-2	1-5105D (K1)	ACTIVE	2	REL	SA	C	6	С	SVT	5A		<u></u>
STEAM GENER	ATOR OME-3-2 SA	AFETY VAL	VE 1A									
1-SV-1A-3	1-5105D (K5)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-3 S/	AFETY VAL	VE 1A									
1-SV-1A-4	1-5105D (C5)	ACTIVE	2	REL	SA	<u> </u>	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-4 S	AFETY VAL	VE #1A					•				
1-SV-1B-1	1-5105D (B1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-1 S	AFETY VAL	VE 1B									
1-SV-1B-2	1-5105D (K1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A	<u>.</u>	
STEAM GENER	ATOR OME-3-2 SA	AFETY VAL	VE 1B									
1-SV-1B-3	1-5105D (K5)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-3 S	AFETY VAL	VE 1B									
1-SV-1B-4	1-5105D (B5)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-4 SA	AFETY VAL	VE 1B									
1-SV-2A-1	1-5105D (B1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-1 S	AFETY VAL	VE 2A									
1-SV-2A-2	1-5105D (L1)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		<u></u>
STEAM GENER	ATOR OME-3-2 S	AFETY VAL	VE 2A									
					<u> </u>							

ALEP AMERICAN* ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

ComponentPID(Coord)FunctionClassTypeActuatorCat.SizeNorm.Fail.TestFreqDev.Comments1-SV-2A-31-5105D (L5)ACTIVE2RELSAC6CSVT5ASTEAM GENERATOR OME-3-3 SAFETY VALVE 2A2RELSAC6CSVT5A1-SV-2A-41-5105D (B5)ACTIVE2RELSAC6CSVT5ASTEAM GENERATOR OME-3-4 SAFETY VALVE 2A2RELSAC6CSVT5A1-SV-2B-11-5105D (B1)ACTIVE2RELSAC6CSVT5ASTEAM GENERATOR OME-3-1 SAFETY VALVE 2B2RELSAC6CSVT5A	
1-SV-2A-31-5105D (L5)ACTIVE2RELSAC6CSVT5ASTEAM GENERATOR OME-3-3 SAFETY VALVE 2A3SAFETY VALVE 2ARELSAC6CSVT5A1-SV-2A-41-5105D (B5)ACTIVE2RELSAC6CSVT5ASTEAM GENERATOR OME-3-4 SAFETY VALVE 2A1-5105D (B1)ACTIVE2RELSAC6CSVT5A1-SV-2B-11-5105D (B1)ACTIVE2RELSAC6CSVT5ASTEAM GENERATOR OME-3-1 SAFETY VALVE 2BSTEAM GENERATOR OME-3-1 SAFETY VALVE 2BSTEAM GENERATOR OME-3-1 SAFETY VALVE 2BSTEAM GENERATOR OME-3-1 SAFETY VALVE 2B	
STEAM GENERATOR OME-3-3 SAFETY VALVE 2A 1-SV-2A-4 1-5105D (B5) ACTIVE 2 REL SA C 6 C SVT 5A STEAM GENERATOR OME-3-4 SAFETY VALVE 2A	
1-SV-2A-41-5105D (B5)ACTIVE2RELSAC6CSVT5ASTEAM GENERATOR OME-3-4 SAFETY VALVE 2A1-SV-2B-11-5105D (B1)ACTIVE2RELSAC6CSVT5ASTEAM GENERATOR OME-3-1 SAFETY VALVE 2B	
STEAM GENERATOR OME-3-4 SAFETY VALVE 2A 1-SV-2B-1 1-5105D (B1) ACTIVE 2 REL SA C 6 C SVT 5A STEAM GENERATOR OME-3-1 SAFETY VALVE 2B	
1-SV-2B-1 1-5105D (B1) ACTIVE 2 REL SA C 6 C SVT 5A STEAM GENERATOR OME-3-1 SAFETY VALVE 2B	
STEAM GENERATOR OME-3-1 SAFETY VALVE 2B	
1-SV-2B-2 1-5105D (L1) ACTIVE 2 REL SA C 6 C SVT 5A	
STEAM GENERATOR OME-3-2 SAFETY VALVE 2B	
1-SV-2B-3 1-5105D (L5) ACTIVE 2 REL SA C 6 C SVT 5A	
STEAM GENERATOR OME-3-3 SAFETY VALVE 2B	
1-SV-2B-4 1-5105D (B5) ACTIVE 2 REL SA C 6 C SVT 5A	<u></u>
STEAM GENERATOR OME-3-4 SAFETY VALVE 2B	
1-SV-3-1 1-5105D (B1) ACTIVE 2 REL SA C 6 C SVT 5A	
STEAM GENERATOR OME-3-1 SAFETY VALVE #3	
1-SV-3-2 1-5105D (L1) ACTIVE 2 REL SA C 6 C SVT 5A	
STEAM GENERATOR OME-3-2 SAFETY VALVE #3	
-1-SV-3-3 1-5105D (L5) ACTIVE 2 REL SA C 6 C SVT 5A	
STEAM GENERATOR OME-3-3 SAFETY VALVE #3	
1-SV-3-4 1-5105D (B5) ACTIVE 2 REL SA C 6 C SVT 5A	
STEAM GENERATOR OME-3-4 SAFETY VALVE #3	


Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-DCR-310	2-5105B (B3)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q		
STEAM GENER	ATOR OME-3-1 BI		CONTA					Έ		FST	Q		
••••••••••								-		ST-C	Q		
	·									PIT	2A		
2-DCR-320	2-5105B (B2)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q		
STEAM GENER	ATOR OME-3-2 BI		CONTA					Έ		FST	Q		
· · · · ·								_		ST-C	Q		
										PIT	2A		
2-DCR-330	2-5105B (B1)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q		
STEAM GENER	ATOR OME-3-3 BI	OWDOWN	CONTA					'E		FST	Q		
								-		ST-C	Q		
•										PIT	2A		
2-DCR-340	2-5105B (B2)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q		
STEAM GENER	ATOR OME-3-4 BI		CONTA			FION	VALV	Έ		FST	Q		
								-	•	ST-C	Q		
										PIT	2A		
2-MCM-221	2-5105D (K4)	ACTIVE	2	GAT	MO	В	4	0	AI	DIAG	1R		· · · · · · · · · · · · · · · · · · ·
MAIN STEAM L	EAD #2 TO AUXILI	ARY FEED	PUMP 1	URBI	NE SHUTC	DFF V	ALVE			FSE	18M		OMN-1
2-MCM-231	2-5105D (K4)	ACTIVE	2	GAT	MO	В	4	0	Al	DIAG	1R	<u> </u>	
MAIN STEAM L	EAD #3 TO AUXILI	IARY FEED	PUMP 1	IURBI	NE SHUTC	DFF V	ALVE			FSE	18M	,	OMN-1
2-MMO-210	2-5105D (A-6)	PASSIVE	2	3W	MO	В	4	0	Al	PIT	2A		
STEAM STOP V	ALVE MRV-210 S	TEAM CYLII	NDER D	UMP \	ALVES S	ELEC	TOR						
2-MMQ-220	2-5105D (M-6)	PASSIVE	2	3W	MO	В	4	0	Al	PIT	2A		· · · · · · · · · · · · · · · · · · ·
STEAM STOP V	ALVE MRV-220 S	TEAM CYLII	NDER D		ALVES S	ELEC	TOR						

7

AEP AMERICAN ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-MMO-230	2-5105D (M-2)	PASSIVE	2	3W	MO	B	4	0	AI	PIT ,	2A		
STEAM STOP V	ALVE MRV-230 S1	FEAM CYLIN	NDER D	UMP V	ALVES S	ELEC	TOR						
2-MMO-240	2-5105D (A-2)	PASSIVE	2	3W	MO	В	4	0	AI	PIT	2A		
STEAM STOP V	ALVE MRV-240 ST	FEAM CYLIN	NDER D	UMP \	ALVES S	ELEC	TOR						
2-MRV-210	2-5105D (B7)	ACTIVE	2	GAT	HYD	В	28	0	С	FSE	С	CSJ - 017	
STEAM GENER	ATOR OME-3-1 SI									FST	С	CSJ - 017	
012 02.121										ST-C	С	CSJ - 017	
		•								PIT	2A		
2-MRV-211	2-5105D (A5)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		
STEAM GENER	ATOR #1 STOP V	AI VE MRV-	210 ST	FAM C		TRAI	ז יאי ו	DUMP		FST	Q		
VALVE										ST-O	Q		
										PIT	2A		
2-MRV-212	2-5105D (A5)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q.		
STEAM GENER	ATOR #1 STOP V		210 STI	FAM C		TRAI	N 'B' (FST	Q		•
VALVE							• – •			ST-O	Q		
										PIT	2A		
2-MRV-213	2-5105D (C7)	ACTIVE	2	POR	AO V	В	6	O/C	С	PIT	2A		
STEAM GENER	ATOR OME-3-1 P		RATED	RELIE						FSE	18M		
										FST	18M	REL - 001	
										ST-C	18M		
										ST-O	18M		
2-MRV-220	2-5105D (L7)	ACTIVE	2	GAT	HYD	В	28	0	С	FSE	С	CSJ - 017	· · · · · · · · · · · · · · · · · · ·
STEAM GENER	ATOR OME-3-2 S		:							FST	С	CSJ - 017	
< 11			-							ST-C	С	CSJ - 017	
4										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

			Code					Posi	tion		-	Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments	
2-MRV-221	2-5105D (M5)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q			
STEAM GENER	ATOR #2 STOP V	AI VE MRV-2	220 STF				יאי ג			FST	Q			
VALVE								Cini		ST-O	Q			
										PIT	2A			
2-MRV-222	2-5105D (M5)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q			
STEAM GENER	ATOR #2 STOP V	ALVE MRV-2	220 STE		LINDER .	TRAIN	N 'B' D	UMP		FST	Q			
VALVE								C		ST-O	Q			
										PIT	2A			
2-MRV-223	2-5105D (K7)	ACTIVE	2	PORV	AO	В	6	O/C	С	PIT	2A		· · · · · · · · · · · · · · · · · · ·	
STEAM GENER	ATOR OME-3-2 PO	OWER OPE	RATED	RELIE						FSE	18M			
		5114. OF 2								FST	18M	REL - 001		
										ST-C	18M			
										ST-O	18M			
2-MRV-230	2-5105D (L3)	ACTIVE	2	GAT	HYD	В	28	0	С	FSE	C	CSJ - 017		
STEAM GENER	ATOR OME-3-3 ST									FST	С	CSJ - 017		
										ST-C	С	CSJ - 017		
5										PIT	2A			
2-MRV-231	2-5105D (M1)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q			
STEAM GENER	ATOR #3 STOP V	AI VE MRV-	230 STE	AM C		TRAIN	N 'A' D	UMP		FST	Q			
VALVE										ST-O	Q			
										PIT	2A			
2-MRV-232	2-5105D (M1)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		· · · · · · · · · · · · · · · · · · ·	
STEAM GENER	ATOR #3 STOP V	ALVE MRV-	230 STF	FAM C'	YLINDER .	TRAIN	N 'B' E	UMP		FST	Q			
,VALVE	* ,							•••••		ST-O	Q			1
•·· • •										PIT	2A			
2-MRV-233	2-5105D (K2)	ACTIVE	2	POR\	AO	В	6	O/C	С	PIT	2A		· · · · · · · · · · · ·	
STEAM GENER	ATOR OME-3-3 PO			RELIE						FSE	18M			
										FST	18M	REL - 001		•
· .										ST-C	18M			
						,				ST-O	18M			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

			Code					Posi	tion			Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-MRV-240	2-5105D (B3)	ACTIVE	2	GAT	HYD	В	28	0	С	FSE	С	CSJ - 017	
STEAM GENERA	TOR OME-3-4 ST									FST	С	CSJ - 017	
										ST-C	C	CSJ - 017	
										PIT	2A		
2-MRV-241	2-5105D (A1)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		
STEAM GENERA	TOR #4 STOP V/	ALVE MRV-2	240 STE		LINDER -	FRAIN	N 'A' C			FST	Q		
VALVE										ST-O	Q		
										PIT	2A		
2-MRV-242	2-5105D (A1)	ACTIVE	2	ANG	AO	В	2	С	0	FSE	Q		
STEAM GENERA	TOR #4 STOP V	ALVE MRV-2	240 STE		LINDER	TRAIN	N 'B' C	UMP		FST	Q		
VALVE				-			· · ·			ST-O	Q		
										PIT	2A		· · · · · · · · · · · · · · · · · · ·
2-MRV-243	2-5105D (C2)	ACTIVE	2	PORV	AO	В	6	O/C	С	PIT	2A		
STEAM GENERA	TOR OME-3-4 PO	OWER OPE	RATED	RELIE						FSE	18M		
										FST	18M	REL - 001	
										ST-C	18M		
										ST-O	18M		
2-MS-108-2	2-5105D (K4)	ACTIVE	3	СНК	SA	С	4	O/C		FS-C	C		
STEAM GENERA CHECK VALVE	TOR OME-3-2 S	TEAM TO A	JXILIAF	RY FEE	D PUMP 1	furb	INE			FS-O	Ç	CSJ - 016	
2-MS-108-3	2-5105D (K4)	ACTIVE	3	CHK	SA	С	4	O/C	i	FS-C	С		
STEAM GENERA CHECK VALVE	TOR OME-3-3 S	FEAM TO AI	JXILIAF	RY FEE	D PUMP 1	TURB	INE			FS-O	С	CSJ - 016	
2-QT-506	2-5105E (A8)	ACTIVE	3	THR	MO	В	4	С	Al	DIAG	3R		
	N AUXILIARY FE	ED PUMP P	P-4 TR		THROTT	I E V				FSE	18M		OMN-1
- 4L						,,				FSE	18M		OMN-1
2-QT-507	2-5105E (A8)	ACTIVE	3	GOV	HYD	В	4	С		FSE	Q		
AUXILIARY FEEI	D PUMP TURBIN	E GOVERNO	OR VAL	VE						FSE	Q		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
2-SV-1A-1	2-5105D (C5)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENERA	TOR OME-3-1 S	AFETY VAL	/E 1A						·			
2-SV-1A-2	2-5105D (K5)	ACTIVE	· 2	REL	SA	С	6	С	SVT	5A		
STEAM GENERA	ATOR OME-3-2 SA	AFETY VAL	/E 1A								-	
2-SV-1A-3	2-5105D (K1)	ACTIVE	2	REL	SA	С	6	C	SVT	5A	<u> </u>	—
STEAM GENER	ATOR OME-3-3 S/	AFETY VAL	VE 1A				÷					
2-SV-1A-4	2-5105D (C1)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-4 SA	AFETY VAL	VE #1A									
2-SV-1B-1	2-5105D (B5)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-1 S	AFETY VAL	VE 1B									
2-SV-1B-2	2-5105D (L5)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-2 S	AFETY VAL	VE 1B									
2-SV-1B-3	2-5105D (K1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-3 S	AFETY VAL	VE 1B				· ·					
2-SV-1B-4	2-5105D (B1)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-4 S	AFETY VAL	VE 1B									
2-SV-2A-1	2-5105D (B5)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-1 S	AFETY VAL	VE 2A									
2-SV-2A-2	2-5105D (L5)	ACTIVE	2	REL	SA	C	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-2 S	AFETY VAL	VE 2A									



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: MS - Main Steam

			Code	<u> </u>				Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
2-SV-2A-3	2-5105D (L1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-3 SA		/E 2A									
2-SV-2A-4	2-5105D (B1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-4 SA	AFETY VAL	VE 2A									
2-SV-2B-1	2-5105D (B5)	ACTIVE	2	REL	SA	C	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-1 SA	AFETY VAL	VE 2B									
2-SV-2B-2	2-5105D (L5)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENER	ATOR OME-3-2 SA	AFETY VAL	VE 2B									
2-SV-2B-3	2-5105D (L1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-3 SA	AFETY VAL	VE 2B									
2-SV-2B-4	2-5105D (B1)	ACTIVE	2	REL	SA	С	6	С	SVT	5A	<u> </u>	
STEAM GENER	ATOR OME-3-4 SA	AFETY VAL	VE 2B									
2-SV-3-1	2-5105D (B5)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		······································
STEAM GENER	ATOR OME-3-1 SA	AFETY VÁL	VE #3									
2-SV-3-2	2-5105D (L5)	ACTIVE	2	REL	SA	С	6	С	SVT	5A		
STEAM GENER	ATOR OME-3-2 S	AFETY VAL	VE #3									
2-SV-3-3	2-5105D (L1)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		· · · · · · · · · · · · · · · · · · ·
STEAM GENER	RATOR OME-3-3 S	AFETY VAL	VE #3									
2-SV-3-4	2-5105D (B1)	ACTIVE	2	REL	SA	С	6	C	SVT	5A		
STEAM GENER	RATOR OME-3-4 SA	AFETY VAL	VE #3									



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WCR-900	1-5114A (J8)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
NESW TO CONT	FAINMENT VENT	LATION UN	IT HV-C	LV-1 T	RAIN 'B' C	ONT		FNT		FST	Q		
ISOLATION VAL	VE					O 111				ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-901	1-5114A (J8)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q	·····	······································
NESW TO CON	AINMENT VENTI	LATION UN	IT HV-C	LV-1 T	RAIN 'A' C	ONT		ENT		FST	Q		
ISOLATION VAL	VE									ST-C	Q	•	
										LJ	OPB		
										PIT	2A		
1-WCR-902	1-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMENT	VENTILATION UN	NIT HV-CLV.	1 NES			N 'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E	THEO							ST-C	Q		
										IJ	OPB		
										PIT	2A		
1-WCR-903	1-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		an an an ann an an an an an an an an an
CONTAINMENT	VENTILATION UP	NIT HV-CLV.	1 NES		I FT TRAII	'A' I				FST	Q	· .	
CONTAINMENT	ISOLATION VAL	/E	THEO.			• • •				ST-C	Q		
										IJ	OPB		
										PIT	2A		
1-WCR-904	1-5114A (J8)	ACTIVE	2	DIA	AO	A	6	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	ILATION UN	IT HV-C	LV-2 T	'RAIN 'A' (ONT		ENT		FST	Q		
ISOLATION VAL	VE									ST-C	Q		
	•									LJ	OPB		
										PIT	2A		
1-WCR-905	1-5114A (J8)	ACTIVE	2	DIA	AO	A	6	0	С	FSE	Q		
NESV TO CON	TAINMENT VENT			21 V-2 T	RAIN 'B' (ONT		ENT		FST	Q		
ISOLATION VAL	.VE			rim V −£n I						ST-C	Q		
										LJ	OPB		
:										PIT	2A		

1

ASP AMERICAN[®] ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WCR-906	1-5114A (J4)	ACTIVE	2	DIA	AO	A	6	0	С	FSE	Q		
CONTAINMENT	I VENTILATION UI	VIT HV-CI V-	2 NES	N OUT	I FT TRAII	יאי ו				FST	Q		
CONTAINMEN	ISOLATION VAL	/E	21120							ST-C	Q		
										LJ .	OPB		· · · · · · · · ·
										PIT	2A		
1-WCR-907	1-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		······································
CONTAINMEN	FVENTILATION UI	NIT HV-CLV	-2 NES	N OUT	LET TRAI	N 'B'				FST	Q		
CONTAINMEN	FISOLATION VALV	/E								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-908	1-5114A (J8)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
NESW TO CON	IT VENT UNIT HV-	CLV-3 AND	RCP'S	#2 & #:	3 FIRE PR	от т	RAIN	'B'		FST	Q		
CONTAINMEN	T ISOLATION VAL	VE				••••		.		ST-C	Q		
										LJ	OPB		
								÷.,		PIT	2A		
1-WCR-909	1-5114A (J8)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q	· · · • • • • • • • •	· · · · · · · · · · · · · · · · · · ·
NESW TO CNT		/-CI V-3 ANI	D RCP'S	3 #2 8	#3 FIRE P	ROT	TRAII	N 'A'		FST	Q		
CONTAINMEN	T ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-910	1-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMEN	T VENTILATION U	NIT HV-CLV	-3 NES	N OUT	LET TRA	N 'B'	•			FST	Q		
CONTAINMEN	T ISOLATION VAL	VE	0.120							ST-C	Q		
	•									LJ	OPB		
• •	•					•				PIT	2A		
1-WCR-911	1-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMEN	T VENTILATION U	NIT HV-CI V	-3 NES	W OUT		N 'A'				FST	Q		
CONTAINMEN	T ISOLATION VAL	VE	•							ST-C	Q		
										LJ	OPB		
							~			PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	. Fail.	Test	Freq	Dev.	Comments
1-WCR-912	1-5114A (J8)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
NESW TO CNT		-CLV-4 AND) RCP'S	#1 & :	4 FIRE P	ROT	TRAIN	ימי נ		FST	Q		
CONTAINMENT	ISOLATION VAL	VE						• / •		ST-C	Q		
										LJ	OPB		
		•								PIT	2A		
1-WCR-913	1-5114A (J8)	ACTIVE	2	DIA	AO	A	6	0	С	FSE	Q		
NESW TO CNT		V-CLV-4 AND	RCP'S	5 #1 & :	#4 FIRE P	ROT	TRAIN	I 'B'		FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-914	1-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CLV-	4 NESV	NOLT		N 'A'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
		-								LJ	OPB		
										PIT	2A		
1-WCR-915	1-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q	· · · · · ·	
CONTAINMENT	VENTILATION U	NIT HV-CLV-	4 NES		I ET TRAI	N 'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-920	1-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	C	FSE	Q		
NESW TO CON	TAINMENT VENT	ILATION UN	IT HV-C	:UV-1 ⁻	FRAIN 'A' (CONT		IENT		FST	Q		
ISOLATION VA	LVE									ST-C	Q		
•	- •									LJ	OPB		
										PIT	2A		
1-WCR-921	1-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	ILATION UN	IT HV-C	:UV-1 ⁻	TRAIN 'B' (CONT				FST	Q		
ISOLATION VA	LVE									ST-C	Q ·		
										IJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Type	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WCR-922	1-5114A (K2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION UN	IT HV-CUV		woun	I ET TRAI	N 'A'				FST	Q.		
CONTAINMENT	ISOLATION VALV	/E	THEO							ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-923	1-5114A (J2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION UN	NIT HV-CUV	-1 NES	w out	LET TRAI	N 'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
										IJ	OPB		
										PIT	2A		
1-WCR-924	1-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
NESW TO CON	TAINMENT VENT			211/-2		CONT		IENT		FST	Q		
ISOLATION VA	LVE		11 11 V -C)0V-2		00.11				ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-925	1-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	ILATION UN	IIT HV-C		TRAIN 'A'	CONT		IENT		FST	Q	•	
ISOLATION VA	LVE					•••••				ST-C	Q		
										LJ	OPB		
s.										PIT	2A		
1-WCR-926	1-5114A (K2)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CUV	-2 NES	w ou	LET TRA	IN 'B'				FST	Q		
CONTAINMEN	ISOLATION VAL	VE								ST-C	Q		
	•									LJ	OPB		
										PIT	2A		
1-WCR-927	1-5114A (J2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	TVENTILATION U	NIT HV-CUV	-2 NES	wour		IN 'A'				FST	Q		
CONTAINMEN	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		

. 4





Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Pos	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	Fail.	Test	Freq	Dev.	Comments
1-WCR-928	1-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		· · ·
NESW TO CON	TAINMENT VENTI	LATION UN	IT HV-C	:UV-3 1	RAIN 'B' (CONT		FNT		FST	Q		
ISOLATION VAI	LVE					00111				ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-929	1-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	LATION UN	וד אע _י כ	:UV-3 1	TRAIN 'A' (CONT		IFNT		FST	Q		
ISOLATION VAL	LVE						/			ST-C	Q		
										LJ	OPB		
	. · · · ·									PIT	2A		
1-WCR-930	1-5114A (K2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT			-3 NES	w oi n		N 'R'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E	-01120							ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-931	1-5114A (J2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION U		-3 NES	W OUT		N 'A'				FST	Q		
CONTAINMENT	SOLATION VAL	/E								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-932	1-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	. 0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	ILATION UN	IT HV-C	.UV-4 ⁻		CONT		IENT		FST	Q		
ISOLATION VA	LVE					00111				ST-C	Q		
•	•									LJ	OPB		
,										PIT	2A		
1-WCR-933	1-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q.		
NESW TO CON	ITAINMENT VENT				TRAIN 'B'					FST	Q		
ISOLATION VA	LVE					00111		1		ST-C	Q		
										LJ	OPB		
										PIT	2A		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code				• . <u></u>	Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WCR-934	1-5114A (K2)	ACTIVE	2	DIA	AO	A	. 3	0	С	FSE	Q		
CONTAINMENT	VENTILATION UN	IT HV-CUV	-4 NES		I FT TRAI	N 'A'				FST	Q		
CONTAINMENT	ISOLATION VALV	/E								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-935	1-5114A (J2)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION UN	NIT HV-CUV	-4 NES	N OUT	LET TRAI	N 'B'				FST	Q		
CONTAINMENT	ISOLATION VALV	/E								ST-C	Q		
										LJ	OPB		
					•					PIT	2A		
1-WCR-941	1-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #1 MO	OTOR A		OLERS T		'B'			FST	Q		
CONTAINMENT	ISOLATION VALV	/E	••••				_			ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-942	1-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q	······	······································
NESW TO REA	CTOR COOLANT	PUMP #2 M			OLERS T		'A'			FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-943	1-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #3 M	OTOR A	IR CO	OLERS TI	RAIN	'B'			FST	Q		
CONTAINMENT	ISOLATION VALV	/E					_			ST-C	Q		
· .	•							•		IJ	OPB		
1										PIT	2A		
1-WCR-944	1-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #4 M	OTOR A		OLERS TI	RAIN	'A'			FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
										IJ	OPB		
					1					PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Pos	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
1-WCR-945	1-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
REACTOR COC					S NESW	ОШТІ	ET TE			FST	Q		
'B' CONTAINME	NT ISOLATION V	ALVE				0012				ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-946	1-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		·····
REACTOR COC		5-2 MOTOR			SNESW	ουτι	FT TF	RAIN		FST	Q		
'A' CONTAINME	NT ISOLATION V	ALVE								ST-C	Q		
										LJ	OPB		
									1	PIT	2A		
1-WCR-947	1-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
REACTOR COO		15-3 MOTOR			RS NESW	ουτι	ET TE	RAIN		FST	Q		
'B' CONTAINME	INT ISOLATION V	ALVE				••••				ST-C	Q		
										IJ	OPB		
					· .				1. A. A.	PIT	2A		
1-WCR-948	1-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	C	FSE	Q	<u>, ne s'ator () () () () () () () () () (</u>	
REACTOR COO		45-4 MOTOF		OOLEF	RS NESW	Ουτι	ET TF	RAIN		FST	Q		
'A' CONTAINME	INT ISOLATION V	ALVE			•••••••			•		ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-951	1-5114A (K6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #1 M			OI FRS T	RAIN	'A'			FST	Q		
CONTAINMENT	SOLATION VAL	VE	010117							ST-C	Q		
	•									LJ	OPB		
	,			,						PIT	2A		
1-WCR+952	1-5114A (K6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #2 M	OTOR			RAIN	'R'			FST	Q		
CONTAINMEN	ISOLATION VAL	VE	010107				5			ST-C	Q		
										LJ	OPB		
										PIT	2A		
Revision 4											***		7



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WCR-953	1-5114A (K6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
NESW TO REAC	TOR COOLANT P	PUMP #3 MO					Δ'			FST	Q		
CONTAINMENT	ISOLATION VALV	/E				v ur v				ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-954	1-5114A (K6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q	-	· · · · · · · · · · · · · · · · · · ·
NESW TO REAC	TOR COOLANT	PUMP #4 M			OLERS TE	AIN '	B'		· .	FST	Q		
CONTAINMENT	ISOLATION VALV	/E					0			ST-C	Q ·		
										LJ	OPB		
										PIT	2A		
1-WCR-955	1-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		•
REACTOR COO					SNESW	онті	FT TI	RAIN		FST	Q		
'A' CONTAINME	NT ISOLATION V	ALVE		JULL.		0012				ST-C	Q		
										LJ	OPB		
•										PIT	2A		
1-WCR-956	1-5114A (J3)	ACTIVE		DIA	AO	Α	3	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
REACTOR COO		5-2 MOTOR			SNESW	ουπι	FT T	RAIN		FST	Q		
'B' CONTAINME	NT ISOLATION V/	ALVE								ST-C	Q		
			an thair. Chirag							LJ	OPB		
~	(1) Strategy (1	and a second sec	and a star Start a start a							PIT	2A		
1-WCR-957	1-5114A (J3)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
REACTOR COO		5-3 MOTOR	AIR C		S NESW	ουτι	FTT	RAIN		FST	Q		
'A' CONTAINME	NT ISOLATION V/	ALVE				00.1				ST-C	Q		
										IJ	OPB		
		:	t t v							PIT	2A		
1-WCR-958	1-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
REACTOR COO				OOLEE	S NESW	ΟΠΤΙ	FT T	RAIN		FST	Q		
'B' CONTAINME	NT ISOLATION V/	ALVE								ST-C	Q		
			· · · · · · · ·							LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-WCR-960	1-5114A (J7)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q		
NESW TO CONT				IR-4 T	RAIN 'B' C	ONT		NT		FST	Q		
ISOLATION VAL	VE	DAHONON		/// · · · ·		0.117				ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-961	1-5114A (K7)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q.		
NESW TO CON		LATION UN	IT HV-C	IR-4 T	RAIN 'A' C	ONT		NT		FST	Q		
ISOLATION VAL	.VE					•••••				ST-C	Q		
										IJ	OPB		
										PIT	2A		
1-WCR-962	1-5114A (J3)	ACTIVE	2	DIA	AO	A	2	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CIR-	4 NESV		FT TRAIN	I 'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-WCR-963	1-5114A (J3)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CIR-	4 NESV	V OUT		N 'A'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
	•									IJ	OPB		
										PIT	2A		
1-WCR-964	1-5114A (J7)	ACTIVE	2	DIA	AO	A	2	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	ILATION UN	IT HV-C	CIR-3 T	RAIN 'A' C	ONT		INT		FST	Q		
ISOLATION VAL	VE									ST-C	Q		
L.	-									LJ	OPB		
, and the second s										PIT	2A		
1-WCR+965	1-5114A (K7)	ACTIVE	2	DIA	AO	A	2	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	ILATION UN	IT HV-C	CIR-3 T	RAIN 'B' C	ONT	AINM	ENT		FST	Q		
ISOLATION VAL	_VE									ST-C	Q		
										LJ	OPB		
		1								PIT	2A		

ALEP AMERICAN" ELECTRIC POWER

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code			
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.		Comments	
1-WCR-966	1-5114A (J3)	ACTIVE	2	DIA	AO	Ä	2	0	C	FSE	Q				
CONTAINMENT	VENTILATION UN	IT HV-CIR-			FT TRAIN	1 'A'			·	FST	Q				
CONTAINMENT	ISOLATION VALV	/E				• • •				ST-C	Q				
										LJ	OPB				
										PIT	2Å			,	
1-WCR-967	1-5114A (J3)	ACTIVE	2	DIA	AO	A	2	0	С	FSE	Q				
CONTAINMENT					ET TRAIN	l 'R'				FST	Q				
CONTAINMENT	ISOLATION VALV	/E	UNLOU							ST-C	Q				
										LJ	OPB	,			
•										PIT	2A				
2-SV-333-1	2-5114A (G8)	ACTIVE	0	REL	SA	С	.75	C		SVT	10A		GL 96-06		
CNTMT LOWER	COMPARTMENT	'QUADRAN /ALVE	T #1 VE	NTILA		r 2-H'	V-CLN	/-1							
2-SV-333-2	2-5114A (G8)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06		
CNTMT LOWER	COMPARTMENT	⁻ QUADRAN /ALVE	T #2 VE	NTILA		Г 2-Н	V-CL\	/-2							
2-SV-333-3	2-5114A (G8)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06		
CNTMT LOWER	R COMPARTMENT	⁻ QUADRAN /ALVE	T #3 VE	NTILA		Г 2-Н	V-CLV	/-3			:				
2-SV-333-4	2-5114A (G8)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06		
CNTMT LOWER	R COMPARTMENT	QUADRAN	T #4 VE	NTILA		Г 2-Н	V-CL\	/-4							
2-SV-334-1	2-5114A (H3)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06		
NESW FROM R	CP #1 MOTOR AI	R COOLERS	6 2-HE-(69-1A /	AND 2-HE	-69-11	3 OU	TLET							
2-SV-334-2	2-5114A (H3)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06		
NESW FROM R SAFETY VALVE	CP #2 MOTOR AI	R COOLERS	6 2-HE-(39-2A /	AND 2-HE	-69-21	3 00	TLET							



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
2-SV-334-3	2-5114A (H3)	ACTIVE	0	REL	SA	. C	.75	с		SVT	10A		GL 96-06	
NESW FROM R SAFETY VALVE	CP #3 MOTOR AII	RCOOLERS	6 2-HE-6	69-3A /	AND 2-HE-	69-3E	3 OU1	LET						
2-SV-334-4	2-5114A (H3)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06	····
NESW FROM R SAFETY VALVE	CP #4 MOTOR All	R COOLERS	6 2-HE-6	69-4A /	AND 2-HE-	69-4E	3 001	LET						
2-SV-335-1	2-5114A (G2)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06	
NESW FROM C	ONTAINMENT VE	NT UNIT 2-I	HV-CUV	-1 OU	TLET SAFI	ETY V	/ALVE	Ξ						
2-SV-335-2	2-5114A (G2)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06	
NESW FROM C	ONTAINMENT VE	NT UNIT 2-I	HV-CUV	-2 00	TLET SAFI	ETY N	/ALVE	Ξ						
2-SV-335-3	2-5114A (G2)	ACTIVE	0	REL	SA	С	.75	C		SVT	10A		GL 96-06	
NESW FROM C	ONTAINMENT VE	NT UNIT 2-I	HV-CUV	'-3 OU	TLET SAFI		/ALVE	3						
2-SV-335-4	2-5114A (G2)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06	
NESW FROM C	ONTAINMENT VE	NT UNIT 2-I	HV-CUV	/-4 OU [*]	TLET SAF	ETY \	/ALVE	Ξ						
2-SV-336-3	2-5114A (G7)	ACTIVE	0	REL	SA	С	.75	С		SVT	10A		GL 96-06	· ·
NESW TO INST	RUMENT ROOM		2-HV-C	ir-3 in	LET SAFE	TY V	ALVE				·			
2-SV-336-4	2-5114A (G3)	ACTIVE	0	REL	SA	С	.75	C		SVT	10A		GL 96-06	
NESW FROM IN		M VENT UN	NIT 2-H\	/-CIR-4	4 OUTLET	SAFE	ETY V	ALVE						
2-WCR-900	2-5114A (J8)	ACTIVE	2	DIA	AO	A	6	0	С	FSE	Q	·		
NESW TO CON	TAINMENT VENT	LATION UN	IIT HV-C	LV-1 1	FRAIN 'B' C	ONT	AINM	ENT		FST	Q			
ISOLATION VAI	LVE	_	_			-				ST-C	Q .			
										LJ	OPB			
										PIT	2A			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

, 		••••••••••••••••••••••••••••••••••••••	Code			2.01.1		Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-901	2-5114A (J8)	ACTIVE	2	DIA	AO	A	6	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
NESW TO CONT				1 V_1 T		ONT		ENT		FST	Q		
ISOLATION VAL	VE									ST-C	Q ·		
					•					LJ	OPB		
										PIT	2A		
2-WCR-902	2-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMENT	VENTILATION UI	NIT HV-CLV-	1 NESV	N OUT	LET TRAII	N 'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE				-				ST-C	Q		
										LJ	OPB		
•		,					•			PIT	2A		
2-WCR-903	2-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CLV-	1 NES	N OUT	LET TRAI	N 'A'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
	, .,									PIT	2A		• •
2-WCR-904	2-5114A (J8)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
NESW TO CON	AINMENT VENT	ILATION UN	IT HV-C	LV-2 1	RAIN 'A' (CONT	AINM	ENT		FST	Q		
ISOLATION VAL	VE	1. (* 1. seven 1975) av 1997 (* 1. seven 1975)								ST-C	Q		
алан алан алан алан алан алан алан алан										LJ	OPB		
		가 있다. 이상 위에 가지 있다. 이상 제품은 이상 가지 있다.	94 2011 - 10 2011 - 10							PIT	2A		
2-WCR-905	2-5114A (J8)	ACTIVE	2	DIA	AO	A	6	0	С	FSE	Q	·	
NESW TO CON	FAINMENT VENT	ILATION UN	IT HV-C	LV-2 1	RAIN 'B' (CONT		ENT		FST	Q		
ISOLATION VAL	VE	2.292 ⁷ * 2								ST-C	Q		
۰.										LJ	OPB		
1				-						ΡΙΤ	2A		
2-WCR+906	2-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CLV	-2 NES	N OUT	LET TRAI	N 'A'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		

Revision 4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-907	2-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMENT		NIT HV-CI V.	2 NESV			יאי ו				FST	Q		
CONTAINMEN	I ISOLATION VAL	/E		1001		10				ST-C	Q		
										LJ	OPB		
										ΡΙΤ	2A		
2-WCR-908	2-5114A (J8)	ACTIVE	2	DIA	AO	Α	. 6	0	С	FSE	Q		<u> </u>
NESW TO CNT		/-CLV-3 ANI	D RCP'S	; #2 & f	#3 FIRE PI	ROT	TRAIN	I 'B'		FST	Q		
CONTAINMEN	T ISOLATION VAL	/E		, ii = ei ;				• -		ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-909	2-5114A (J8)	ACTIVE	2	DIA	AO	Α	6	0	C	FSE	Q		· · · · · · · · · · · · · · · · · · ·
NESW TO CNT		/-CI V-3 ANI		. #2 & i	3 FIRE PI	ROT	TRAIN	'A' I		FST	Q		
CONTAINMEN	T ISOLATION VAL	/E						• • •		ST-C	Q		
										° LJ	OPB		
										PIT	2A		
2-WCR-910	2-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	C	FSE	Q		
CONTAINMEN	T VENTILATION U	NIT HV-CI V	-3 NES		LET TRAI	N 'B'				FST	Q		
CONTAINMEN	T ISOLATION VAL	VE	0.120							ST-C	Q		
										IJ	OPB		
										PIT	2A		
2-WCR-911	2-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
CONTAINMEN	T VENTILATION U	NIT HV-CI V	-3 NES			N 'A'		•		FST	Q		
CONTAINMEN	T ISOLATION VAL	VE	01120							ST-C	Q		
•	•									LJ	OPB		
,										PIT	2A		· · ·
2-WCR-912	2-5114A (J8)	ACTIVE	2	DIA	AO	A	6	0	С	FSE	Q	· · · · · ·	
NESW TO COM	NT VENT UNIT HV.	CI V-4 AND	RCP'S	#1 & #4	4 FIRE PR	от т	RAIN	'A'		FST	Q		
CONTAINMEN	T ISOLATION VAL	VE				••••		••		ST-C	Q		
										LJ	OPB		
										PIT	2A		

Revision 4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-913	2-5114A (J8)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		
NESW TO CONT	VENT UNIT HV-	CLV-4 AND	RCP'S #	¥1 & #4	FIRE PR		Rain 'e	3'		FST	Q		
CONTAINMENT	ISOLATION VALV	VE								ST-C	. Q		
										LJ	OPB		
										PIT	2A		
2-WCR-914	2-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		· · ·
CONTAINMENT	VENTILATION U	NIT HV-CLV	4 NESV	V OUT	LET TRAII	'A'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE				•••				ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-915	2-5114A (J4)	ACTIVE	2	DIA	AO	Α	6	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
CONTAINMENT	VENTILATION U	NIT HV-CLV	4 NESV			N'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
t										PIT	2A		
2-WCR-920	2-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
NESW TO CON	AINMENT VENT	ILATION UN	IT HV-C	:UV-1 1	FRAIN 'A' (CONT		=NT		FST	Q		
ISOLATION VAL	VE									ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-921	2-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q .		· · · · · · · · · · · · · · · · · · ·
NESW TO CON	LAINMENT VENT		IT HV-C	:UV-1 1	FRAIN 'B' (CONT		ENT		FST	Q		
ISOLATION VAL	VE									ST-C	Q		
· .	•								÷	LJ	OPB		
, i	•		÷							PIT	2A		
2-WCR-922	2-5114A (K2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CUV	-1 NES	W OLIT	I FT TRAI	N 'A'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size N	lorm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-923	2-5114A (J2)	ACTIVE	2	DIA	AO	Α	3	0	C	FSE	Q		
CONTAINMENT						N'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
		_								IJ	OPB		
										PIT	2A		
2-WCR-924	2-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	I ATION UN	IT HV-C	:UV-2 1	RAIN 'B' (CONT		NT		FST	Q		
ISOLATION VAL	LVE									ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-925	2-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
NESW TO CON	TAINMENT VENT			:UV-2 1		CONT		NT		FST	Q		
ISOLATION VA							/ 111 11112			ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-926	2-5114A (K2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT			-2 NES	wour		N 'R'				FST	Q		
CONTAINMEN	ISOLATION VAL	VE	LILU							ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-927	2-5114A (J2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMEN		NIT HV-CUM	-2 NES	wour		N 'A'				FST	Q		
CONTAINMEN	ISOLATION VAL	VE								ST-C	Q		
	•									LJ	OPB		
	,									PIT	2A		
2-WCR-928	2-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
NESW TO CON	ITAINMENT VENT		IIT HV-C	CUV-3		CONT		NT		FST	Q		
ISOLATION VA	LVE									ST-C	Q		
										LJ	OPB		
										PIT	2A		





Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

· · · · ·			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Турө	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-929	2-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	ATION UN	IT HV-C	UV-31	RAIN 'A' (CONT		IENT		FST	Q		
ISOLATION VA	LVE									ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-930	2-5114A (K2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CUV	-3 NES	W OUT	LET TRAI	N 'B'				FST	Q		
CONTAINMEN	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-931	2-5114A (J2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION U	NIT HV-CUV	-3 NES	W OUT	LET TRAI	N 'A'				FST	Q		
CONTAINMEN	ISOLATION VAL	VE	••••							ST-C	Q		
		-								LJ	OPB		
										PIT	2A		
2-WCR-932	2-5114A (J6)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
NESW TO CON	TAINMENT VENT	I ATION UN	IT HV-C	:UV-4 ⁻	FRAIN 'A' (CONT		IENT		FST	Q		
ISOLATION VA	LVE						,			ST-C	Q		
	ti aldina si sua si sua si sua si									IJ	OPB		
	· · ·			· · ·						PIT	2A		
2-WCR-933	2-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
NESW TO COM	TAINMENT VENT	ILATION UN	IT HV-C	UV-4 ⁻	TRAIN 'B' (CONT		IENT		FST	Q		
ISOLATION VA	LVE							,		ST-C	Q		
•	•• ,									IJ	OPB		
Ĵ.										PIT	2A		
2-WCR-934	2-5114A (K2)	ACTIVE	2	DIA	AO	Â	3	0	С	FSE	Q	· · · · · · · · · · · · · · · · · · ·	
CONTAINMEN	VENTILATION U	NIT HV-CUV	-4 NES	W OUT	LET TRAI	N 'A'				FST	Q		
CONTAINMEN	FISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion		-	Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-935	2-5114A (J2)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
CONTAINMENT	VENTILATION UI	NIT HV-CUV	-4 NES	W OUT		N 'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
					4					IJ	OPB		
										PIT	2A		
2-WCR-941	2-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #1 M	OTOR A		OLERS TE	RAIN '	'B'	•		FST	Q		
CONTAINMENT	ISOLATION VAL	VE								ST-C	Q		
										LJ	OPB		
	•									PIT	2A		
2-WCR-942	2-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	Ċ	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #2 M			OLERS T	RAIN	'A'			FST	Q		
CONTAINMEN	ISOLATION VAL	VE								ST-C	Q		
		. *								LJ	OPB		
										PIT	2A		
2-WCR-943	2-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #3 M	OTOR A		OLERS T	RAIN	'B'			FST	Q		
CONTAINMEN	SOLATION VAL	VE					- .			ST-C	Q		
									a.	LJ	OPB		
										PIT	2A		
2-WCR-944	2-5114A (J6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
NESW TO REA	CTOR COOLANT	PUMP #4 M	OTOR A	AIR CO	OLERS T	RAIN	'A'			FST	Q		
CONTAINMEN	ISOLATION VAL	VE	•••••							ST-C	Q		
	•									LJ	OPB		
										PIT	2A		
2-WCR-945	2-5114A (K3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
REACTOR CO	OLANT PUMP PP-	45-1 MOTOF		OOLEF	RS NESW	ουπι	FT T	RAIN		FST	Q.		
'B' CONTAINMI	ENT ISOLATION V	ALVE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
Revision 4										<u> </u>			17



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code				<i></i>	Posi	tion	· ·		Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-946	2-5114A (K3)	ACTIVE	2	DIA	AO	A	3	0	С	FSE	Q		
REACTOR COO	LANT PUMP PP-4	5-2 MOTOR			SNESW	OUTL	ET TE	RAIN		FST	Q		
'A' CONTAINME	NT ISOLATION VA	LVE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-947	2-5114A (K3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q ·		· · · · · · · · · · · · · · · · · · ·
REACTOR COO	LANT PUMP PP-4	5-3 MOTOR			SNESW	ουτι	ET TE	RAIN		FST	Q		
'B' CONTAINME	NT ISOLATION VA	ALVE						u ui t		ST-C	Q		
										· LJ	OPB		
	·									PIT	2A		
2-WCR-948	2-5114A (K3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
REACTOR COO		5-4 MOTOR			SNESW	ουτι	ET TE	RAIN		FST	ຊ່		
'A' CONTAINME	NT ISOLATION VA	ALVE		OULLI						ST-C	Q		
										IJ	OPB		
										PIT	2A		
2-WCR-951	2-5114A (K6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
NESW TO READ	CTOR COOLANT I	PUMP #1 M					'A'			FST	Q		
CONTAINMENT	ISOLATION VAL	/E	010117			U ui V				ST-C	Q		
					*					LJ	OPB		
										PIT	2A		
2-WCR-952	2-5114A (K6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q	·····	<u> </u>
NESW TO READ	CTOR COOLANT				OLERS TH		'R'			FST	Q		
CONTAINMENT	ISOLATION VAL	/E			012110 11		-			ST-C	Q		
	•									LJ	OPB		
Ê.							•			PIT	2A		
2-WCR-953	2-5114A (K6)	ACTIVE	2	DIÁ	AO	Α	3	0	С	FSE	Q		
NESW TO READ	CTOR COOLANT	PUMP #3 M			OI FRS TE	RAIN	'A'			FST	Q		
CONTAINMENT	ISOLATION VAL	/E				v ui v				ST-C	Q		
										LJ	OPB		
										PIT	2A		

Revision 4

Units 1 & 2



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-954	2-5114A (K6)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		-
NESW TO REA	CTOR COOLANT I						'B'			FST	Q		
CONTAINMEN	FISOLATION VAL	/E	010117				-		•	ST-C	Q		
										LJ	OPB		
										PIT	2A		· .
2-WCR-955	2-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	C	FSE	Q		<u>,</u>
REACTOR COO		5-1 MOTOR			SNESW	ουτι	FTT	RAIN		FST	Q		
'A' CONTAINME	ENT ISOLATION V	ALVE		0022.		0012				ST-C	Q		
										IJ	OPB		
										PIT	2A		
2-WCR-956	2-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
REACTOR CO					SNESW	OUTI	FTT	RAIN		FST	Q		
'B' CONTAINM	ENT ISOLATION V	ALVE	· / li · O			0011		i v ui v		ST-C	Q		
			÷							LJ	OPB		
		•								PIT	2A		
2-WCR-957	2-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q		
REACTOR CO		45-3 MOTOF			RSNESW	OUTI	FTT	RAIN		FST	Q		
'A' CONTAINMI	ENT ISOLATION V	ALVE		0022						ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-958	2-5114A (J3)	ACTIVE	2	DIA	AO	Α	3	0	С	FSE	Q	······································	in an
REACTOR CO		45-4 MOTOF		OOLEF		ουτι	FTT	RAIN		FST	Q		
'B' CONTAINM	ENT ISOLATION V	ALVE		0011.			·			ST-C	Q		
	•									IJ	OPB		
	·									PIT	2A		
2-WCR-960	2-5114A (J7)	ACTIVE	2	DIA	AO	A	2	0	С	FSE	Q		
NESW TO COM						ONT		ENT		FST	Q		
ISOLATION VA	LVE									ST-C	Q		
										LJ.	OPB		
										PIT	2A		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	. Fail.	Test	Freq	Dev.	Comments
2-WCR-961	2-5114A (J7)	ACTIVE	2	DIA	AO	Α	2	0	C	FSE	Q		· ·
NESW TO CON	TAINMENT VENTI	LATION UN	IT HV-C	IR-4 T	RAIN 'A' C	ONT		≓NT		FST	Q		
ISOLATION VAL	_VE					0.117				ST-C	Q		
										LJ	OPB		
					,					PIT	2A		
2-WCR-962	2-5114A (J3)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q		
CONTAINMENT	VENTILATION UN		4 NESV			I 'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
								IJ	OPB				
			. •							PIT	2A		
2-WCR-963	2-5114A (J3)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q		
CONTAINMENT		VIT HV-CIR-	4 NESV			'A' I				FST	Q		
CONTAINMENT	ISOLATION VAL	/E				• • •				ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-964	2-5114A (J7)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q		
NESW TO CON				UR-3 T	RAIN 'A' C			ENT		FST	Q		
ISOLATION VA				/II \- O		0.017				ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-WCR-965	2-5114A (J7)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q		na ana amin'ny faritr'o designa amin'ny faritr'o dia
NESW TO CON	TAINMENT VENT		IT HV-C	UR-3 T	RAIN 'B' C	ONT		FNT		FST	Q		
ISOLATION VA	LVE									ST-C	Q		
	•									LJ	OPB	÷	
	•									PIT	2A		
2-WCR-966	2-5114A (J3)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q		
CONTAINMENT			3 NESV			י אי נ				FST	Q		
CONTAINMEN	ISOLATION VAL	VE				10				ST-C	Q		
										LJ	OPB		
										PIT	2A		



12

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Revision 4

Donald C. Cook Nuclear Plant IST Program Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NESW - Non-Essential Service Water

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Type	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-WCR-967	2-5114A (J3)	ACTIVE	2	DIA	AO	A	2	0	С	FSE	Q		
CONTAINMENT		NIT HV-CIR-	3 NESV		FT TRAIN	I 'B'				FST	Q		
CONTAINMENT	ISOLATION VAL	/E	011201							ST-C	Q		
	r									LJ	OPB		
	· .									PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NG - Nitrogen Blanketing

			Code		,			Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-GCR-301	1-5128A (B8)	ACTIVE	2	DIA	AO	A	0.75	O/C	С	FSE	Q		
REACTOR PLA	NT SERVICES NIT	ROGEN TO	PRESS	URIZE	RREUF			E-5		FST	Q		
CONTAINMENT	T ISOLATION VAL	/E	THEOL			.,		- 0		ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-GCR-314	1-5143A (K1)	ACTIVE	2	GAT	AO	Α	1	O/C	С	FSE	Q		
NITROGEN SU					IMENT IS	דא וכ				FST	Q		
				//////////////////////////////////////						ST-C	Q		
										LJ	OPB		
		· .								PIT	2A		
1-IRV-112	1-5143A (B3)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
ACCUMULATO	R TANK OME-6-1	NITROGEN	SUPPL	Y/VEN	T VALVE								
1-IRV-122	1-5143A (M3)	PASSIVE	2	GLB	AO	В	1	C	С	PIT	2A		
ACCUMULATO	R TANK OME-6-2	NITROGEN	SUPPL	YVEN	T VALVE								
1-IRV-132	1-5143A (J3)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
ACCUMULATO	OR TANK OME-6-3	NITROGEN	SUPPL	Y/VEN	T VALVE				, ·				
1-IRV-142	1-5143A (F3)	PASSIVE	2	GLB	AO	В	1	C	С	PIT	2A	······································	
ACCUMULATO	OR TANK OME-6-4	NITROGEN	SUPPL	Y/VEN	T VALVE								
1-N-102	1-5143A (J1)	ACTIVE	2	СНК	SA	AC	1	0/C		BDT-O	Q		
REACTOR PLA	ANT NITROGEN SL	JPPLY TO A	CCUML	LATO	RTANKS	CON	ΓΑΙΝΝ	IENT		FS-C	Q		Condition Monitoring Program
ISOLATION CH	ECK VALVE									LJ	OPB		
1-N-159	1-5128A (C8)	ACTIVE	2	CHK	SA	AC	0.75	5 O/C		BDT-O	R		
REACTOR PLA	ANT NITROGEN TO	PRESSUR	IZER R	ELEIE		E-5				FS-C	R	ROJ - 010	Condition Monitoring Program
CONTAINMEN	T ISOLATION CHE	CK VALVE	randard V V V							ĹĴ	_ R		·



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NG - Nitrogen Blanketing

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-N-160	12-5137A (F4)	ACTIVE	2	СНК	SA	AC	1	O/C		BDT-O	R		
REACTOR PLAN	T NITROGEN TO	REACTOR	COOLA			. TK- 1		ECK		FS-C	R	ROJ - 006	Condition Monitoring Program
VALVE										LJ	R		
2-GCR-301	2-5128A (B8)	ACTIVE	2	DIA	AO	Α	0.75	5 O/C	С	FSE	Q		······································
REACTOR PLAN	T SERVICES NIT	ROGEN TO	PRESS	URIZE	R RELIEF	TAN	KON	1E-5		FST	Q		
CONTAINMENT	ISOLATION VALV	Έ								ST-C	Q		
										LJ	OPB		
	· · · · · · · · · · · · · · · · · · ·									PIT	2A		
2-GCR-314	2-5143A (K1)	ACTIVE	2	GAT	AO	Α	1	O/C	С	FSE	Q		
NITROGEN SUP	PLY TO ACCUMU	LATOR TAI	NKS CO	NTAIN	MENT ISC	LATI	ON V	/ALVE		FST	Q		
										ST-C	Q		
										LJ	OPB		
						~				PIT	2A		_
2-IRV-112	2-5143A (B3)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
ACCUMULATOR	TANK OME-6-1 N	ITROGEN	SUPPL	/VEN	VALVE								
2-IRV-122	2-5143A (M3)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
ACCUMULATOR	TANK OME-6-2 N	NITROGEN	SUPPL	//VENT				,					
2-IRV-132	2-5143A (J3)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		······
ACCUMULATOR	TANK OME-6-3 N	NITROGEN	SUPPL	//VEN ⁻									
2-IRV-142	2-5143A (F3)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
ACCUMULATOR	TANK OME-6-4 N	NITROGEN	SUPPL	//VEN ⁻	VALVE								
2-N-102	2-5143A (J1)	ACTIVE	2	СНК	SA	AC	1	O/C		BDT-O	Q		
REACTOR PLAN	IT NITROGEN SU	PPLY TO A	ссими	LATO	R TANKS (СОИТ		IENT		FS-C	Q		Condition Monitoring Program
ISOLATION CHE	CK VALVE									LJ	OPB		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NG - Nitrogen Blanketing

			Code					Positio	n			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. F	ail.	Test	Freq	Dev.	Comments
2-N-159	2-5128A (C8)	ACTIVE	2	СНК	SA	AC	0.75	O/C		BDT-O	R		· · ·
REACTOR PLA	NT NITROGEN TO	PRESSURI		FI FIF T		-5				FS-C	R	ROJ - 010	Condition Monitoring Program
CONTAINMENT	ISOLATION CHEC	CK VALVE				- •				LJ	R		
2-N-160	12-5137A (F4)	ACTIVE	2	CHK	SA	AC	1	0		BDT-O	R	······	
REACTOR PLA	NT NITROGEN TO	REACTOR	COOLA			с тк	1 CHE	СК		FS-C	R	ROJ - 006	Condition Monitoring Program
VALVE						<u> </u>				LJ	R		

3

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Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NS - Nuclear Sampling

e ' '''''''''''''''''''''''''''''''''''			Code					Pos	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	Fail.	Test	Freq	Dev.	Comments
1-DCR-202	12-5137A (E5)	ACTIVE	2	DIA	AO	Α	0.75	С	С	FSE	Q		
REACTOR COO		K GAS SAN		51-200	ΤΡΔΙΝ 'Δ'	CONT	ταινι	IENT		FST	Q		
ISOLATION VAL	.VE			01-200	TIVEN IN		173030			ST-C	Q		
										IJ	OPB		
										PIT	2 A		
1-DCR-204	12-5137A (F5)	ACTIVE	2	DIA	AO	Α	0.75	С	С	FSE	Q		
REACTOR COO		K GAS SAN		51-200	TRAIN 'B'	CON	TAINN	IENT		FST	Q		
ISOLATION VAL	.VE			51 200						ST-C	Q		
		· .								ĹJ	OPB		
										PIT	2A		
1-DCR-301	1-5141A (B2)	ACTIVE	2	GLB	AO	В	0.5	0	C	FSE	Q		
STEAM GENER	ATOR #1 BLOWD	OWN SAME	PLE DSF	R-301 (CONTAIN	IENT				FST	Q		
ISOLATION VAL	VE									ST-C	Q		
										PIT	2A		
1-DCR-302	1-5141A (B3)	ACTIVE	2	GLB	AO	В	0.5	0	С	FSE	Q	· · ·	
STEAM GENER	ATOR #2 BLOWD	OWN SAMP	PLE DSP	R-302 (CONTAIN	/ENT	•			FST	Q		
ISOLATION VAL	LVE									ST-C	Q		
					•					PIT	2A		
1-DCR-303	1-5141A (B3)	ACTIVE	2	GLB	AO	В	0.5	0	С	FSE	Q		
STEAM GENER	ATOR #3 BLOWD	OWN SAMF	PLE DS	R-303 (CONTAIN	IENT	•			FST	Q		
ISOLATION VAI	LVE									ST-C	Q		
										PIT	2A		
1-DCR-304	1-5141A (B3)	ACTIVE	2	GLB	AO	В	0.5	0	С	FSE	Q		
STEAM GENER	ATOR #4 BLOWD	OWN SAM	PLE DSI	R-304 (CONTAIN	MENT	•			FST	Q		
ISOLATION VAI	LVE									ST-C	Q		
r (1										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NS - Nuclear Sampling

			Code					Posi	tion			Code	
Component	PiD(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
1-ICR-5	1-5141 (C5)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
ACCUMULATO	R TANK SAMPLES	SISX-1 ISX-4		'A' CC				ΓΙΟΝ		FST	Q		
VALVE			, 110 ui							ST-C	Q		
										LJ	OPB		· · · · · · · · · · · · · · · · · · ·
										PIT	2A		
1-ICR-6	1-5141 (D5)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q	·····	
ACCUMULATO	R TANK SAMPLES	SISX-1 AND	ISX-4 T	RAIN '			NT			FST	Q		
ISOLATION VAL										ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-MCR-251	1-5141A (B2)	ACTIVE	2	GLB	AO	В	0.5	С	С	FSE	Q	······································	
STEAM GENER	ATOR #1 STEAM	SAMPLE MS	SX-101	CONT		SOL		1		FST	Q		
VALVE								-		ST-C	Q		
					• •					PIT	2A		· · · ·
1-MCR-252	1-5141A (B2)	ACTIVE	2	GLB	AO	В	0.5	С	С	FSE	Q		
STEAM GENER	ATOR #2 STEAM	SAMPLE MS	SX-102	CONT		ISOL		١		FST	Q		
VALVE										ST-C	Q		
										PIT	2A		
1-MCR-253	1-5141A (B1)	ACTIVE	2	GLB	AO	В	0.5	С	С	FSE	Q		
STEAM GENER	ATOR #3 STEAM	SAMPLE MS	SX-103	CONT		ISOL		1		FST	Q		
VALVE	· · · · · · · · · · · · · · · · · · ·							•		ST-C	Q		
										PIT	2A		· · · · · ·
1-MCR-254	1-5141A (B1)	ACTIVE	2	GLB	AO	В	0.5	Ċ	C	FSE	Q		· · · · · · · · · · · · · · · · · · ·
STEAM GENER	ATOR #4 STEAM	SAMPLE MS	SX-104	CONT		ISOL		J		FST	Q		
VALVE										ST-C	Q		
 N 										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NS - Nuclear Sampling

	وجمعتهم التنتك التلاتي يهينهم		Code					Posi	tion	······		Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-NCR-105	1-5141 (C7)	ACTIVE	2	GLB	AO	Α	0.5	С	C	FSE	Q		·····
REACTOR COO	I ANT HOT LEG S	SAMPLES NS	SX-101		SX-103 TF		Δ'			FST	Q		
CONTAINMENT	ISOLATION VAL	VE			0.1100 11					ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-NCR-106	1-5141 (C7)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		· · ·
REACTOR COO	LANT HOT LEG	SAMPLES NS	SX-101	AND N	SX-103 TF	RAIN	'B'			FST	Q		
CONTAINMENT	ISOLATION VAL	VE					_			ST-C	Q		·
										LJ	OPB		
								а. А.		PIT	2A		
1-NCR-107	1-5141 (D6)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
PRESSURIZER	LIQUID SPACE S		(-102 TE	RAIN 'A	CONTAI	NMEN	л			FST	Q	•	
ISOLATION VAL	.VE			•			••			ST-C	Q		
										LJ	OPB		
			· .							PIT	2A		
1-NCR-108	1-5141 (D6)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		······································
PRESSURIZER	LIQUID SPACE S	SAMPLE NS)	(-102 TI			NMEN	л			FST	Q		
ISOLATION VAL	VE			00702						ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-NCR-109	1-5141 (C5)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
PRESSURIZER	STEAM SPACE		(-104 T	RAIN '	A' CONTAI	NMFI	JT			FST	Q		
ISOLATION VAL	.VE						••			ST-C	Q		
	•									LJ	OPB		
										PIT	2A		
1-NCR-110	1-5141 (C6)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
PRESSURIZER	STEAM SPACE S		(-104 T			NME	т			FST	Q		
ISOLATION VAL	.VE		· 107 1	wur L						ST-C	Q		
	-									LJ	OPB		
										PIT	2A		

3



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NS - Nuclear Sampling

-	· · · · · · · · · · · · · · · · · · ·		Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Type	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-NS-620	1-5141 (B4)	ACTIVE	2	СНК	SA	С	0.5	Ċ		BDT-C	R		
SAFETY INJEC	TION ACCUMULAT	FOR SAMPL	ING LI	NE 1-IR	V-3 BYPA	SS C	HECK	K		FS-O	R	ROJ - 040	Condition Monitoring Program
1-NS-621	1-5141 (B3)	ACTIVE	2	CHK	SA	С	0.5	С		BDT-C	R		
REACTOR COC BYPASS CHEC) LANT LOOP #3 H K VALVE	OT LEG SA	MPLE S	HUTO	FF VALVE	1-NF	RV-10:	3		FS-O	R	ROJ - 040	Condition Monitoring Program
1-NS-622	1-5141 (B2)	ACTIVE	2	CHK	SA	С	0.5	С		BDT-C	R		
PRESSURIZER CHECK VALVE	LIQUID SPACE S	AMPLE SHU	JTOFF	VALVE	1-NRV-10	2 BY	PASS			FS-O	R	ROJ - 040	Condition Monitoring Program
1-RCR-100	1-5128A (B7)	ACTIVE	2	GLB	AO	A	0.38	C	С	FSE	Q		
PRESSURIZER	RELIEF TANK VE		E NSI-5	1 TR 'A	CONTAI	MEN	п			FST	Q		
ISOLATION VAI	LVE				•••••					ST-C	Q		
					4 ¹					LJ	OPB		
										PIT	2A		
1-RCR-101	1-5128A (B7)	ACTIVE	2	GLB	AO	Α	0.38	C	С	FSE	Q		
PRESSURIZER	RELIEF TANK VE	NT SAMPLE	E NSI-5 ⁴	1 TR 'B	' CONTAII	MEN	т			FST	Q		
ISOLATION VAI	LVE				• • • • • • • • •					ST-C	Q		
										IJ	OPB		
										PIT	2A _		
2-DCR-202	12-5137A (E5)		2	DIA	AO	Α	0.75	С	С	FSE	Q		
REACTOR COC	LANT DRAIN TAN	IK GAS SAN	IPLE D	SI-200	TRAIN 'A'	CON	TAINN	IENT		FST	Q		
ISOLATION VAI	LVE									ST-C	Q		
							•			LJ	OPB		
s	•-									PIT	2A		
2-DCR-204	12-5137A (F5)	ACTIVE	2	DIA	AO	Α	0.75	C	C	FSE	Q		
REACTOR COC	LANT DRAIN TAN	IK GAS SAN	APLE D	SI-201	TRAIN 'B'	CON	TAIN	/ENT		FST	Q		
ISOLATION VAL	LVE				–			•		ST-C	Q		
										IJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NS - Nuclear Sampling

			Code		· .			Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-DCR-301	2-5141A (B2)	ACTIVE	2	GLB	AO	в	0.5	0	С	FSE	Q		
STEAM GENER	ATOR #1 BLOWD	OWN SAMP		2-301 (IENT				FST	Q		
ISOLATION VAL	VE									ST-C	Q		
•										PIT	2A		
2-DCR-302	2-5141A (B3)	ACTIVE	2	GLB	AO	В	0.5	0	С	FSE	Q		
STEAM GENER	ATOR #2 BLOWD	OWN SAMP	I E DSE	2-302 (IFNT				FST	Q		
ISOLATION VAL	VE		LL 001							ST-C	Q		
			-							PIT	2A		
2-DCR-303	2-5141A (B3)	ACTIVE	2	GLB	AO	В	0.5	0	С	FSE	Q		
STEAM GENER				2-303 (CONTAININ					FST	Q		
ISOLATION VAL	VE									ST-Ċ	Q		
										PIT	2A	-	
2-DCR-304	2-5141A (B3)	ACTIVE	2	GLB	AO	В	0.5	0	С	FSE	Q		
STEAM GENER	ATOR #4 BLOWD		N F DSP	R-304 (CONTAIN	JENT	•			FST	Q		
ISOLATION VAL	.VE				00117					ST-C	Q		
					1.					PIT	2A		
2-ICR-5	2-5141 (C5)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q	······	
ACCUMULATOR	R TANK SAMPLES	SISX-1 ISX-4				INT IS	SOLA	TION		FST	Q		
VALVE			r 110 di							ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-ICR-6	2-5141 (D5)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
ACCUMULATOR	R TANK SAMPLES	SISX-1 AND	ISX-4	RAIN	'B' CONTA		INT			FST	Q		
ISOLATION VAL	VE									ST-C	Q		
I .										LJ	OPB		
1 11										PIT	2A		
2-MCR-251	2-5141A (B2)	ACTIVE	2	GLB	AO	В	0.5	С	С	FSE	Q		
STEAM GENER	ATOR #1 STEAM	SAMPI E MS	SX-101	CONT		ISOL		N		FST	Q		
VALVE				- • • • • •						ST-C	Q		
										PIT	2A		

5



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NS - Nuclear Sampling

			Code				•	Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments	
2-MCR-252	2-5141A (B2)	ACTIVE	2	GLB	AO	В	0.5	С	С	FSE	Q			
STEAM GENER	ATOR #2 STEAM	SAMPLE MS	SX-102 (CONT		SOLA		J -		FST	Q			
VALVE				U UIII		002		•		ST-C	Q ·			
					¥					PIT	2A			
2-MCR-253	2-5141A (B1)	ACTIVE	2	GLB	AO	В	0.5	С	С	FSE	Q			
STEAM GENER	ATOR #3 STEAM	SAMPLE MS	SX-103	CONT		SOLA		J		FST	Q			
VALVE				•••••		000		•	· .	ST-C	Q			
							• •			PIT	2A			
2-MCR-254	2-5141A (B1)	ACTIVE	2	GLB	AO	В	0.5	С	С	FSE	Q		· ·	
STEAM GENER	ATOR #4 STEAM	SAMPLE MS	SX-104	CONT		SOLA		J		FST	Q			
VALVE								•		ST-C	Q			
										PIT	2A	-		
2-NCR-105	2-5141 (C7)	ACTIVE	2	GLB	AO	Α	0.5	С	C	FSE	Q			
REACTOR COO	LANT HOT LEG	SAMPLES N	SX-101		ISX-103 TE	RAIN	'A'			FST	Q			
CONTAINMENT	ISOLATION VAL	VE	0/1101							ST-C	Q			
										LJ	OPB			
										PIT	2A			
2-NCR-106	2-5141 (C7)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q			
REACTOR COO	ANT HOT LEG	SAMPLES N	SX-101		ISX-103 TI	RAIN	'B'			FST	Q			
CONTAINMENT	ISOLATION VAL	VE		/		• • • •	5			ST-C	Q			
										LJ	OPB			
										PIT	2A			
2-NCR-107	2-5141 (D6)	ACTIVE	2	GLB	AO	Α	0.5	С	C	FSE	Q		<u></u>	
PRESSURIZER	LIQUID SPACE S		(-102 TI				JT			FST	Q			
' ISOLATION VAL	_VE			ware /			••			ST-C	Q			
< <1										LJ	OPB			
•										PIT	2A			


Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NS - Nuclear Sampling

			Code					Posit	ion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-NCR-108	2-5141 (D6)	ACTIVE	2	GLB	AO	A	0.5	С	c	FSE	Q		
PRESSURIZER	LIQUID SPACE S	AMPLE NSX	-102 TF	RAIN 'B	' CONTAI	NMEN	IT .			FST	Q		
ISOLATION VAL	VE									ST-C	Q .		
										LJ	OPB		
										PIT	2 A		
2-NCR-109	2-5141 (C5)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
PRESSURIZER	STEAM SPACE S	AMPLE NSX	(-104 TF	RAIN 'A	' CONTAI	NMEN	JT .			FST	Q		
ISOLATION VAI	LVE			-			•••			ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-NCR-110	2-5141 (D6)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
PRESSURIZER	STEAM SPACE S		-104 TI			NMEN	JT			FST	Q.		
ISOLATION VAL	LVE						••			ST-C	Q		
										IJ	OPB		
										PIT	2A		
2-NS-620	2-5141 (B4)	ACTIVE	2	CHK	SA	С	0.5	С		BDT-C	R		
SAFETY INJEC	TION ACCUMULA	TOR SAMPL	ING LI	NE BYF	PASS CHE	CK V	ALVE	E		FS-O	R	ROJ - 040	Condition Monitoring Program
2-NS-621	2-5141 (B3)	ACTIVE	2	СНК	SA	С	0.5	С		BDT-C	R		
REACTOR COC BYPASS CHEC	DLANT LOOP #3 H K VALVE	OT LEG SAI	MPLE S	HUTO	FF VALVE	2-NF	RV-10	3		FS-O	R	ROJ - 040	Condition Monitoring Program
2-NS-622	2-5141 (B2)	ACTIVE	2	CHK	SA	С	0.5	С		BDT-C	R		
PRESSURIZER CHECK VALVE	LIQUID SPACE S	AMPLE SHU	JTOFF	VALVE	2-NRV-10)2 BY	PASS	5		FS-O	R	ROJ - 040	Condition Monitoring Program
2-RCR-100	2-5128A (B7)	ACTIVE	2	GLB	AO	A	0.38	C	С	FSE	Q.		₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩
			NSI-5	אי אד כ			т			FST	Q		
ISOLATION VA			- 1101-02			NIVIĘIN	• •			ST-C	Q		
										L	OPB		
										PIT	2A		

Revision 4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: NS - Nuclear Sampling

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-RCR-101	2-5128A (B7)	ACTIVE	2	GLB	AO	A	0.38	C	С	FSE	Q		
PRESSURIZER	RELIEF TANK VEI		NSI-52	TR 'B'	CONTAIN	IMFN	т			FST	Q	x	
ISOLATION VAL	VE						•			ST-C	Q		
										LJ	OPB		
	. *									PIT	2A		

4

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posit	ion			Code	
Component	PID(Coord)	Function	Class	Type	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CA-7042	1-5120NN (B4)	ACTIVE	0	СНК	SA	С	0.75	O/C		BDT-O	Q		
BACKUP AIR TO	TRAIN 'A' PACHN	S CHECK								FS-C	Q		Leakage Test
										LT	2A		
1-CA-7043	1-5120NN (B1)	ACTIVE	0	CHK	SA	С	0.75	O/C		BDT-O	Q	1 IV	
BACKUP AIR TO	TRAIN 'B' PACHM	IS CHECK	VALVE							FS-C	Q		Leakage Test
										LT	2A		
1-ECR-10	1-5141D (C8)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMENT	HYDROGEN MON	ITORING S	YSTEM	S SAM	IPLE RETI	JRN	HEAD	ER		FST	Q		
TRAIN 'A' CNTM	IT ISOLATION VAL	VE								ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-11	1-5141D (A2)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMENT	UPPER VOLUME	EAST AIR S	SAMPLE	EESR-	1 CONTAI	NME	NT			FST	Q		
ISOLATION VAL	.VE									ST-C	Q		
	-									ST-O	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-12	1-5141D (A2)	ACTIVE	2	GLB	AO	Α	0.5	C	С	FSE	Q		
CONTAINMENT	HYDROGEN REC	OMBINER I	HR1 AR	EA SA	MPLE ESF	र-2				FST	Q		
CONTAINMENT	ISOLATION VALV	E								ST-C	Q		
										ST-O	Q		
	-									LJ	OPB		
×	••••••••••••••••••••••••••••••••••••••									PIT	2A		······································
1-ECR-13	1-5141D (A2)	ACTIVE	2	GLB	AO	Α	0.5	С	C	FSE	Q		
CONTAINMENT	LOWER VOLUME	EAST AIR	SAMPL	E ESR	-3 CONTA	INME	INT			FST	Q		
ISOLATION VAL	_VE									ST-C	Q		
										ST-O	Q		
								÷		LJ	OPB		
										PIT	2A		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-ECR-14	1-5141D (A3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T LOWER VOLUME	EWEST AIR	SAMPI	F FSF	A CONT		ENT			FST	Q		· · ·
ISOLATION VA	LVE									ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2 A		
1-ECR-15	1-5141D (A1)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T DOME EAST AIR	SAMPLE E	SR-5 CO	ONTAI	MENT IS	OLAT	10N			FST	Q		
VALVE										ST-C	Q		
										ST-O	Q		
										·LJ	OPB		
										PIT	2A		
1-ECR-16	1-5141D (A3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T DOME WEST AIF	R SAMPLE E	SR-6 C	ONTA	NMENT IS	SOLA	TION			FST	Q		
VALVE		· · · · · · · · · · · · · · · · · · ·								ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-17	1-5141D (A3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T UPPER VOLUME	WEST AIR	SAMPL	E ESR	-7 CONTA	INME	INT			FST	Q		
ISOLATION VA	LVE									ST-C	Q		
		>								ST-O	Q		
										LJ	OPB		
•	<u>.</u>									PIT	2A		
1-ECR-18	1-5141D (A4)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
CONTAINMEN	T HYDROGEN REC	OMBINER	HR2 AR	EA AIF		ESR	-8			FST	Q		
CONTAINMEN	T ISOLATION VALV	/E					-			ST-C	Q.		
					a.					ST-O	Q		
										IJ	OPB		
										PIT	2A		

AMERICAN ELECTRIC POWER

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: PAS - Post Accident Sampling

<u></u>		·· · ·	Code					Posi	lon			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size M	vorm.	Fall.	Test	Freq	Dev.	Comments
1-ECR-19	1-5141D (A4)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMENT	DOME AIR SAME	LE ESR-9	CONTA	INMEN	T ISOLAT		/ALVE			FST	Q		
										ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-20	1-5141D (C8)	ACTIVE	2	GLB	AO	A	0.5	C	С	FSE	Q		
CONTAINMENT	THYDROGEN MO	NITORING	SYSTE	MS SAI	MPLE RET	TURN	HEAD	ER		FST	Q		
TRAIN 'B' CNTR	MT ISOLATION VA	LVE								ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-21	1-5141D (B2)	ACTIVE	2	GLB	AO	A	0.5	С	С	FSE	Q		
CONTAINMEN	T UPPER VOLUME	E EAST AIR	SAMPL	E ESR	-1 CONTA		ENT			FST	Q		
ISOLATION VA	LVE									ST-C	Q		
										ST-O	Q		
				1997 - 1997 1997 - 1997						LJ	OPB		
										PIT	2A	_	
1-ECR-22	1-5141D (B2)	ACTIVE	2	GLB	AO	A	0.5	C	С	FSE	Q		
CONTAINMEN		COMBINER	HR1 A	REA S/	AMPLE ES	6R-2				FST	Q		
CONTAINMEN	T ISOLATION VAL	VE				-				ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-23	1-5141D (B2)	ACTIVE	2	GLB	AO	A	0.5	С	С	FSE	Q		
CONTAINMEN		E EAST AIR		I E ESI	R-3 CONT		FNT			FST	Q		
ISOLATION VA										ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: PAS - Post Accident Sampling

			Code		-			Posi	tion			Code	·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-ECR-24	1-5141D (B3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN				E ESE	R-4 CONT		=NT			FST	Q		
ISOLATION VA	LVE									ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		·
1-ECR-25	1-5141D (B1)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T DOME EAST AIR		SR-5 CO		MENT IS		ION			FST	Q		
VALVE				011111		0				ST-C	Q		
										ST-O	Q		Р
										LJ	OPB		
										PIT	2A		
1-ECR-26	1-5141D (B3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T DOME WEST AI		-SR-6 C		INMENT IS		TION			FST	Q		
VALVE				Ç						ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-27	1-5141D (B3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN		WEST AIR	SAMPI	E ESE	-7 CONTA		INT			FST	Q		
ISOLATION VA										ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-28	1-5141D (B4)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		······································
CONTAINMEN			HR2 AF		R SAMPI F	ESR	-8			FST	Q		
CONTAINMEN	T ISOLATION VAL	VE					. •			ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-ECR-29	1-5141D (B4)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMENT	DOME AIR SAMP	LE ESR-9 C								FST	Q		•
CONTRACTOR OF										ST-C	Q		
										ST-O	Q		
										IJ	OPB		
										PIT	2A		
1-ECR-31	12-5141F (B5)	ACTIVE	2	GLB	AO	Α	1	0	C	FSE	Q		·····
CNTMT LOWER		RAD DETE	CTOR E	ERS-13	00 SAMPI	E HE	EADEI	R		FST	Q		
TRAIN 'A' CONT	AINMENT ISOL V	ALVE						-		ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-32	12-5141F (B5)	ACTIVE	2	GLB	AO	Α	1	0	C	FSE	Q		<u> </u>
CNTMT LOWER		RAD DETE	CTOR E	ERS-13	00 SAMPI	LE HE		R		FST	Q		
TRAIN 'B' CONT	AINMENT ISOL V	ALVE								ST-C	Q		
										LJ	OPB		
										PIT	2 A		
1-ECR-33	12-5141F (B5)	ACTIVE	2	GLB	AO	Α	0.75	0	С	FSE	Q		
CNTMT LOWER	COMPARTMENT	RAD DETE	CTOR E	ERS-14	100 SAMPI	LE HE		R		FST	Q		
TRAIN 'B' CONT	AINMENT ISOL V	ALVE								ST-C	Q		
										LJ	OPB		
					-					PIT	2A		
1-ECR-35	12-5141F (B5)	ACTIVE	2	DIA	AO	Α	2	0	С	FSE	Q		
CNTMT LOWER	COMPT RAD DE	TECTOR EF	RS-1400	SAMF	LE HEAD	ER TF	RAIN	'A'		FST	Q		
CONTAINMENT	ISOLATION VAL	/E								ST-C	Q		
										LJ	OPB		
<u>e 11</u>	<u>.</u>	·······								PIT	2A		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: PAS - Post Accident Sampling

			Code					Posi	tion			Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-ECR-36	12-5141F (B6)	ACTIVE	2	DIA	AO	Α	2	0	C	LJ	OPB		
CNTMT I OWER	COMPT RADIATI	ON DETEC	TORS E	RS-13		RS-14	00			FSE	С	CSJ - 013	
SAMPLE RETUR	RN HEADER CNT	AT ISOL VA	LVE							FST	С	CSJ - 013	
										ST-C	С	CSJ - 013	
										PIT	2A		
1-ECR-416	12-5141C (B6)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
LOWER CONTA	INMENT SUMP PA	AS SAMPLE	FSX-4	00 SAN		DER	TRAI	'A' I		FST	Q		
CONTAINMENT	ISOLATION VALV	Έ		00 0/				• • •		ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-417	12-5141C (B6)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
LOWER CONTA		AS SAMPLE	ESX.4	00 SAN		DER	TRAI	N 'R'		FST	Q		
CONTAINMENT	ISOLATION VALV	(E) (), (), () (E)		00 0/ 1		1				ST-C	Q		
		,		·	÷.,					LJ	OPB		
					. •					PIT	2A		
1-ECR-496	12-5141C (B8)	ACTIVE	2	GLB	AO	A	0.5	C	С	FSE	Q	<u></u>	
PAS LIQUID & C	SAS SAMPLING S		STE TO			NME				FST	Q		
'A' CONTAINME	NT ISOLATION VA				10011174			V UI V		ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-ECR-497	12-5141C (B8)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		<u></u>
PAS LIQUID & C	AS SAMPLING S		STE TO		1 CONTAI	NMF		ZAIN		FST	Q		
'B' CONTAINME	NT ISOLATION VA				10011174			y urv		ST-C	Q		
	•									LJ	OPB		
	•									PIT	2A		
1-ECR+535	12-5141C (B2)	ACTIVE	2	GLB	AO	A	0.5	С	С	FSE	Q	· · · · · · · · · · · · · · · · · · ·	<u> </u>
CONTAINMENT	PAS GAS SAMPI	E ESX-1 TO	PASI	סווס	AND GAS	SAM	PI IN	Э.,		FST	Q		
STATION TRAIN	A' CNTMT ISOL	VALVE				0/ 11/				ST-C	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion		· · · · · · · · · · · · · · · · · · ·	Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-ECR-536	12-5141C (C2)	ACTIVE	2	GLB	AO	Å	0.5	С	С	FSE	Q		
CONTAINMENT F	AS GAS SAMPLE	EESX-1 TO	PASL	. סוטסו	AND GAS	SAM	PI IN(3		FST	Q		
STATION TRAIN	B' CNTMT ISOL \	ALVE				•/		-		ST-C	Q		
										LJ	OPB		
										PIT	2A		
1-ESO-30	1-5141D (E3)	ACTIVE	0	GAT	SO	В	0.75	0	С	LT	R		Skid-mounted
CONTAINMENT F	AS HYDROGEN	MONITORI	NG TR/	AIN 'A' :	SAMPLE F	PUMF	SUP	PLY					
1-ESO-50	1-5141D (M6)	ACTIVE	0	GAT	SO	В	0.75	0	С	LT	R		Skid-mounted
CONTAINMENT F	AS HYDROGEN	MONITORI F VALVE	NG TR/	AIN 'A'	SAMPLE F	PUMF		•					
1-ESO-60	1-5141D (F7)	ACTIVE	0	GAT	SO	В	0.75	0	С	LT	R		Skid-mounted
CNTMT AIR SAM SAMPLE ANALYZ	PLES TO CNTMT	PAS HYDF	ROGEN /ALVE	MONI	FORING T	RAIN	'B'				· .		
1-ESO-80	1-5141D (L7)	ACTIVE	0	GAT	SO	В	0.75	<u>i 0</u>	C	LT	R		Skid-mounted
CONTAINMENT I	AS HYDROGEN	MONITORI F VALVE	NG TR/	AIN 'B'	SAMPLE I	PUMF							
1-NS-283	1-5141D (C8)	ACTIVE	2	CHK	SA	AC	0.5	С		FS-C	R	ROJ - 024	Condition Monitoring Program
CONTAINMENT I	YDROGEN MON	ITORING S	SYSTEM	IS SAM	PLE RET	URN	HEAD	DER		LJ	R		
CHECK VALVE										FS-O	Q		
1-NS-348	1-5141D (J4)	ACTIVE	0	CHK	SA	AC	0.25	5 C		BDT-O	R		Skid-mounted
HYDROGEN CAL	IBRATION GASE	S TO CNT		HYDR	OGEN					FS-C	R		LJ
MONITORING TH	AIN 'A' SMPL AN	ALYZER CI	HECK V	ALVE					•	LJ	OPB		
1-NS-349	1-5141D (K4)	ACTIVE	0	CHK	SA	AC	0.25	5 C		BDT-O	R		Skid-mounted
HYDROGEN CAL	IBRATION GASE	S TO CNT	IT PAS	HYDR	OGEN					FS-C	R		LJ
MONITORING TR	AIN 'A' SMPL AN	ALYZER CI	HECK V	ALVE						LJ	OPB		
1-NS-850	1-5141D (L4)	ACTIVE	0	CHK	SA	AC	0.25	5 C		BDT-O	R		Skid-mounted
CONTAINMENT I	PAS HYDROGEN	MONITORI	NG TR	AIN 'A'	SAMPLE	ANAL	YZEF	ł		FS-C	R		LJ
REAGENT GAS	BYPASS CHECK	VALVE								LJ	OPB		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-NS-353	1-5141D (J4)	ACTIVE	0	СНК	SA	ÁC	0.25	С		BDT-O	R		Skid-mounted
HYDROGEN CA	LIBRATION GASE	S TO CNT	T PAS	HYDR	OGEN					FS-C	R		IJ
MONITORING TI	RAIN 'B' SMPL AN	ALYZER CH	IECK V	ALVE						LJ	OPB		
1-NS-354	1-5141D (K4)	ACTIVE	0	CHK	SA	AC	0.25	С		BDT-O	R		Skid-mounted
HYDROGEN CA	IBRATION GASE	S TO CNT	IT PAS	HYDR	OGEN					FS-C	R		IJ
MONITORING T	RAIN 'B' SMPL AN	ALYZER CH	HECK V	ALVE	UULIT					LJ	OPB		
1-NS-355	1-5141D (L4)	ACTIVE	0	CHK	SA	AC	0.25	С		BDT-O			Skid-mounted
CONTAINMENT	PAS HYDROGEN	MONITORI		IN 'R'						FS-C	R		IJ
SAMPLE ANALY	ZER REAGENT G	AS BYPAS	S CHEC	K VAL	VE					LJ	OPB		
1-NS-357	1-5124 (K9)	ACTIVE	2	CHK	SA	AC	0.5	C	···· 4- 414	FS-C	R	ROJ - 024	Condition Monitoring Program
	D GAS SAMPLING		DC-100	7 SAM	DI E WAS	IF TO		Г 1		LJ	R		
CONTAINMENT	CHECK VALVE		20-100							FS-O	Q		
1-SM-1	12-5141F (A6)	ACTIVE	2	СНК	SA	AC	1	0	C.	FS-C	R	ROJ - 018	Condition Monitoring Program
CNTMT LOWER	COMPT RADIATI	ON DETEC	TORS F	RS-13		RS-14	100			LJ	R		
SAMPLE RETUR	RN HEADER CHE	CK VALVE				10-1-				BDT-O	Q		
2-CA-7044	2-5120KK (B4)	ACTIVE	0	CHK	SA	C	0.75	0/C		BDT-O	Q		
										FS-C	Q		Leakage Test
										LT	2A		
2-CA-7045	2-5120KK (B1)	ACTIVE	0	СНК	SA	С	0.75	O/C		BDT-O	Q		
										FS-C	Q		Leakage Test
			VALVL							LT	2A		-
2-ECR-10	2-5141D (C8)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMENT	HYDROGEN MON		YSTEM	IS SAM				FR		FST	Q		
TRAIN 'A' CNTM	T ISOLATION VAL	VE								ST-C	Q		
										ST-O	Q		
< 41					•					LJ	OPB		
4										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: PAS - Post Accident Sampling

			Code	-				Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-ECR-11	2-5141D (A2)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T UPPER VOLUME	EAST AIR S	SAMPLE	ESR-	1 CONTAI	NME	T			FST	Q		
ISOLATION VA	LVE						•••			ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-12	2-5141D (A2)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T HYDROGEN REC		HR1 AR	FA SA	MPLE ESP	2-2				FST	Q		
CONTAINMEN	T ISOLATION VAL	/E								ST-C	Q		
										ST-O	Q		
						•				LJ	OPB		·
										PIT	2A		
2-ECR-13	2-5141D (A2)	ACTIVE	2	GLB	AO	A	0.5	C	С	FSE	Q		
CONTAINMEN			SAMPI	FESR			NT			FST	Q		
ISOLATION VA	ALVE									ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-14	2-5141D (A3)	ACTIVE	2	GLB	AO	Α	0.5	<u> </u>	С	FSE	Q		
CONTAINMEN		E WEST AIR		E ESF	R-4 CONT		INT			FST	Q		
ISOLATION VA	ALVE									ST-C	Q		
										ST-O	Q		
										LJ	OPB		
	•									PIT	2A		
2-ECR-15	2-5141D (A1)	ACTIVE	2	GLB	AO	A	0.5	С	С	FSE	Q		
CONTAINMEN			SR-5 CO	νται		<u>ΟΙ ΔΤ</u>				FST	Q	:	
VALVE										ST-C	Q		
· · · · · · · ·										ST-O	Q	,	
										ĹĴ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-ECR-16	2-5141D (A3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		-
CONTAINMEN	T DOME WEST AIR		SR-6 C		NMENT IS		TION			FST	Q		
VALVE				011174						ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-17	2-5141D (A3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T UPPER VOLUME	WEST AIR	SAMPL	E ESR	-7 CONTA		INT			FST	Q		
ISOLATION VA	LVE		•••••							ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-18	2-5141D (A4)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q	······	
CONTAINMEN	T HYDROGEN REC		HR2 AR	REA AIF		ESR	-8			FST	Q		
CONTAINMEN	T ISOLATION VAL	/E								ST-C	Q		
										ST-O	Q		
										LJ	OPB		
					~					PIT	2A		
2-ECR-19	2-5141D (A4)	ACTIVE	2	GLB	AO	A	0.5	С	С	FSE	Q	,,	
CONTAINMEN	T DOME AIR SAME	PLE ESR-9 (NMEN	ISOLATI	ON V		•		FST	Q		
						••••		-		ST-C	Q		
										ST-O	Q		
										LJ	OPB		
	•									PIT	2A		
2-ECR-20	2-5141D (C8)	ACTIVE	2	GLB	AO	A	0.5	С	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
CONTAINMEN	T HYDROGEN MO		SYSTEM	AS SAN	IPLE RET	URN	HFAI	DER		FST	Q		
TRAIN 'B' CNT	MT ISOLATION VA	LVE								ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion		· · · · ·	Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-ECR-21	2-5141D (B2)	ACTIVE	2	GLB	AO	Α	0.5	С	C	FSE	Q		
CONTAINMENT	UPPER VOLUME	EAST AIR S	SAMPLE	EESR-	1 CONTAI	NME	NT			FST	Q		
ISOLATION VA	LVE						••			ST-C	Q		
										ST-O	Q		
										LJ	OPB		
					1					PIT	2A		
2-ECR-22	2-5141D (B2)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMENT	HYDROGEN REC	OMBINER I	HR1 AR	EA SA	MPLE ESF	२-२				FST	Q		•
CONTAINMENT	FISOLATION VALV	/E								ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-23	2-5141D (B2)	ACTIVE	2	GLB	AO	Α	0.5	C	С	FSE	Q		
CONTAINMEN		E EAST AIR	SAMPL	E ESR	-3 CONTA	INME	NT			FST	Q		
ISOLATION VA	LVE									ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-24	2-5141D (B3)	ACTIVE	2	GLB	AO	Α	0.5	C	С	FSE	Q		
CONTAINMEN	LOWER VOLUME	E WEST AIR		LE ESI	R-4 CONT	AINM	ENT			FST	Q		
ISOLATION VA	LVE									ST-C	Q		
										ST-O	Q		
										LJ	OPB		
•	• ,									PIT	2A		
2-ECR-25	2-5141D (B1)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T DOME EAST AIR	SAMPLE E	SR-5 C		NMENT IS	OLAT	ION			FST	Q		
VALVE										ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Nom.	Fail.	Test	Freq	Dev.	Comments
2-ECR-26	2-5141D (B3)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMEN	T DOME WEST AIR		SR-6 C	ONTAI	NMENT IS					FST	Q		
VALVE				•••••						ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-27	2-5141D (B3)	ACTIVE	2	GLB	AO	A	0.5	C	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
CONTAINMEN	T UPPER VOLUME	WEST AIR	SAMPI	E ESR	-7 CONTA		NT			FST	Q		
ISOLATION VA	LVE									ST-C	Q		
										ST-O	Q		
							. *			LJ	OPB		
										PIT	2A		
2-ECR-28	2-5141D (B4)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		· · · · · · · · · · · · · · · · · · ·
CONTAINMEN	T HYDROGEN REC		HR2 AR			ESR	-8			FST	Q		
CONTAINMEN	T ISOLATION VAL	/E					•			ST-C	Q		
										ST-O	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-29	2-5141D (B4)	ACTIVE	2	GLB	AO	Α	0.5	C.	С	FSE	Q		
CONTAINMEN	T DOME AIR SAME	PLE ESR-9 (NMEN	T ISOLATI					FST	Q		
								-		ST-C	Q		
								,		ST-O	Q		
•										LJ	OPB		
	-									PIT	2A		
2-ECR-31	12-5141F (B3)	ACTIVE	2	GLB	AO	Α	<u>1</u>	0	С	FSE	Q		
CNTMT LOWE	R COMPARTMENT	RAD DETE	CTOR I	ERS-23	BOO SAMP	LE HE	EADE	R		FST	Q		
TRAIN 'A' CON	TAINMENT ISOL V	ALVE								ST-C	Q		
										LJ	OPB		
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion		• • •	Code	
Component	PID(Coord)	Function	Class	Турө	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-ECR-32	12-5141F (B3)	ACTIVE	2	GLB	AO	A	1	0	С	FSE	Q		
		RAD DETE	CTOR F	-RS-23	OO SAMPI	E HE		2		FST	Q		
TRAIN 'B' CON	TAINMENT ISOL V	ALVE						•		ST-C	Q		
				•						LJ	OPB		
										PIT	2A		
2-ECR-33	12-5141F (B2)	ACTIVE	2	GLB	AO	Α	0.75	0	С	FSE	Q		
CNTMT LOWE	R COMPARTMENT	RAD DETE	CTOR B	ERS-24	00 SAMPI	LE HE	EADER	र		FST	Q		
TRAIN 'B' CON	TAINMENT ISOL V	ALVE								ST-C	Q		
										s LJ	OPB		
										PIT	2A		
2-ECR-35	12-5141F (B2)	ACTIVE	2	GLB	AO	Α	2	0	С	FSE	Q		
CNTMT LOWE	R COMPT RAD DE	TECTOR EF	RS-2400) SAMF	LE HEAD	ER T	RAIN '	A'		FST	Q		
CONTAINMEN	T ISOLATION VALV	Æ						-		ST-C	Q.		
										LJ	OPB		
										PIT	2A		
2-ECR-36	12-5141F (B3)	ACTIVE	2	GLB	AO	Α	1	0	С	LJ	OPB		· · · · · · · · · · · · · · · · · · ·
CNTMT LOWE	R COMPT RADIATI	ON DETEC	TORS E	ERS-23	00 AND E	RS-2	400			FSE	С	CSJ - 013	
SAMPLE RETU	JRN HEADER CNT	MT ISOL VA	LVE							FST	С	CSJ - 013	
			· · · · · ·							ST-C	С	CSJ - 013	
		• 								PIT	2A		
2-ECR-416	12-5141C (M6)	ACTIVE	2	GLB	AO	Α	0.5	C	С	FSE	Q		
LOWER CONT	AINMENT SUMP P	AS SAMPLE	E ESX-4	00 SAI			TRAIN	'A' I		FST	Q		
CONTAINMEN	T ISOLATION VALV	/E						• • •		ST-C	Q	·	
	• • • • • • •									LJ	OPB		
	·									ΡΪΤ	2A		
2-ECR-417	12-5141C (M6)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
LOWER CONT	AINMENT SUMP P	AS SAMPLE	E ESX-4	00 SA			TRAIN	N'B'		FST	Q		
CONTAINMEN	T ISOLATION VALV	/E								ST-C	Q		
										LJ	OPB		
*										PIT	2A		
Revision 4	<u></u>				·						•	· · · · · · · · · · · · · · · · · · ·	10



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code	<u>م الار معاقد ال</u>				Posi	tion			Code	······································
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-ECR-496	12-5141C (M8)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		-
PAS LIQUID & G	AS SAMPLING ST	ATION WA	STE TO		2 CONTAI	NME	NT TR	AIN		FST	Q		
'A' CONTAINMEN	IT ISOLATION VA	LVE								ST-C	Q		
		,								LJ	OPB		
										PIT	2A		
2-ECR-497	12-5141C (M8)	ACTIVE	2	GLB	AO	A	0.5	С	С	FSE	Q		
PAS LIQUID & G	AS SAMPLING ST	ATION WA	STE TO		2 CONTAI	NME	NT TR	AIN		FST	Q		
'B' CONTAINMEN	IT ISOLATION VA	LVE								ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-ECR-535	12-5141C (M2)	ACTIVE	2	GLB	AO	A	0.5	С	С	FSE	Q		
CONTAINMENT I	PAS GAS SAMPLI	E ESX-1 TO	PASI		AND GAS	SAM	PLING	•		FST	Q		
STATION TRAIN	'A' CNTMT ISOL \	ALVE				•/ •/				ST-C	Q		
										LJ	OPB		
										ΡΙΤ	2A		
2-ECR-536	12-5141C (L2)	ACTIVE	2	GLB	AO	Α	0.5	С	С	FSE	Q		
CONTAINMENT	PAS GAS SAMPL	F FSX-1 TC	PASI		AND GAS	SAM		}		FST	Q		
STATION TRAIN	B' CNTMT ISOL	ALVE				0/ 1/				ST-C	Q		
										LJ	OPB		
										PIT	2A		
2-ESO-30	2-5141D (E3)	ACTIVE	0	GAT	SO	В	0.75	0	С	LT	R		Skid-mounted
CONTAINMENT	PAS HYDROGEN TOFF VALVE	MONITORI	NG TR/	AIN 'A'	SAMPLE F	PUMF	SUP	PLY					
2-ESO-50	2-5141D (M6)	ACTIVE	0	GAT	SO	В	0.75	0	С	LT	R		Skid-mounted
CONTAINMENT	PAS HYDROGEN LENOID SHUTOF	MONITORI F VALVE	NG TR/	AIN 'A'	SAMPLE F	PUMF)						
2-ESO-60	2-5141D (F7)	ACTIVE	0	GAT	SO	В	0.75	0	С	LT	Ř		Skid-mounted
CNTMT AIR SAM SAMPLE ANALY	PLES TO CNTMT	PAS HYDF SHUTOFF V	ROGEN /ALVE	MONIT		RAIN	'B'						



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

()			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-ESO-80	2-5141D (L7)	ACTIVE	0	GAT	SO	В	0.75	5 0	С	LT	R	·	Skid-mounted
CONTAINMENT DISCHARGE SO	PAS HYDROGEN LENOID SHUTOF	MONITORI F VALVE	NG TRA	NN 'B'	SAMPLE F	PUMP					• `		
2-NS-283	2-5141D (C8)	ACTIVE	2	CHK	SA	AC	0.5	С		FS-C	R	ROJ - 024	Condition Monitoring Program
	HYDROGEN MON	ITORING S	YSTEM	IS SAN	IPLE RET	JRN	HEAD	DER		LJ FS-0	R O		
2-NS-348	2-5141D (J4)	ACTIVE	0	СНК	SA	AC	0.25	5 C		BDT-O	 		Skid-mounted
								-		FS-C	R		IJ
MONITORING T	LIDRATION GASE	ALYZER CI	HECK V		UGEN					LJ	OPB		
2-NS-349	2-5141D (K4)	ACTIVE	0	СНК	SA	AC	0.25	5 C		BDT-O	R		Skid-mounted
DEAGENT GAS			DOGE							FS-C	R		IJ
TRAIN 'A' SAMP	LE ANALYZER CH	HECK VALV	E							IJ	OPB		
2-NS-350	2-5141D (L4)	ACTIVE	0	СНК	SA	AC	0.2	5 C		BDT-O	R		Skid-mounted
CONTAINMENT	PAS HYDROGEN	MONITORI		AIN 'A'	SAMPLE		Y7FF	2		FS-C	R		LJ
REAGENT GAS	BYPASS CHECK	VALVE						•		LJ	OPB		
2-NS-353	2-5141D (J4)	ACTIVE	0	CHK	SA	AC	0.2	5 C		BDT-O	R		Skid-mounted
HYDROGEN CA	UBRATION GASE			HYDR	OGEN					FS-C	R		LJ · ·
MONITORING T	RAIN 'B' SMPL AN	IALYZER CI	HECK V	ALVE						LJ	OPB		
2-NS-354	2-5141D (K4)	ACTIVE	0	CHK	SA	AC	0.2	5 C		BDT-O	R		Skid-mounted
REAGENT GAS		IT PAS HY	DROGE		IITORING					FS-C	R		LJ
TRAIN 'B' SAMP	LE ANALYZER CI	IECK VALV	Έ							LJ	OPB		
2-NS-355	2-5141D (L4)	ACTIVE	0	CHK	SA	AC	0.2	5 C		BDT-O	R		Skid-mounted
CONTAINMENT	PAS HYDROGEN			AIN 'B'	SAMPLE		YZEF	र		FS-C	R	•	LJ
REAGENT GAS	BYPASS CHECK	VALVE								IJ	OPB		
2-NS-357	2-5124 (K9)	ACTIVE	2	CHK	SA	AC	0.5	C		FS-C	R	ROJ - 024	Condition Monitoring Program
PAS LÍQUID AN	D GAS SAMPLING	STATION	QC-100	7 SAM	PLE WAS	TE TO	O UN	IT 2		LJ	R		
CONTAINMENT	CHECK VALVE									FS-O	Q		· · · · · · · · · · · · · · · · · · ·



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: PAS - Post Accident Sampling

		-	-										
			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-SM-1	12-5141F (A3)	ACTIVE	2	СНК	SA	AC	1	0	С	FS-C	R	ROJ - 018	Condition Monitoring Program
CNTMT I OWER	COMPT RADIATIO		TORS E	RS-230	00 AND EI	RS-24	100			LJ	R		
SAMPLE RETUR	RN HEADER CHEC	K VALVE								BDT-O	Q		

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: RCS - Reactor Coolant System

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CS-442-1	1-5128A (B4)	ACTIVE	2	СНК	SA	AC	2	0		FS-C	R	ROJ - 009	Condition Monitoring Program
REACTOR COO	LANT PUMP SEA		UECTIC	ON TO	RCP PP-4	5-1				LJ	R		
CONTAINMENT	ISOLATION CHEC	CK VALVE				• •				FS-O	Q		
1-CS-442-2	1-5128A (B4)	ACTIVE	2	CHK	SA	AC	2	• 0		FS-C	R	ROJ - 009	Condition Monitoring Program
REACTOR COO	LANT PUMP SEAL	WATER IN	UECTIC	ON TO	RCP PP-4	5-2				LJ	R		
CONTAINMENT	ISOLATION CHEC	CK VALVE								FS-O	Q		
1-CS-442-3	1-5128A (B4)	ACTIVE	2	CHK	SA	AC	2	0		FS-C	R	ROJ - 009	Condition Monitoring Program
REACTOR COC	LANT PUMP SEA	L WATER IN	JECTIC	ON TO	RCP PP-4	5-3				LJ	R		
CONTAINMENT	ISOLATION CHEC	CK VALVE								FS-O	Q		
1-CS-442-4	1-5128A (B4)	ACTIVE	2	CHK	SA	AC	2	0	_	FS-C	R	ROJ - 009	Condition Monitoring Program
REACTOR COC	LANT PUMP SEA		JECTIC	ON TO	RCP PP-4	5-4				LJ	R		
CONTAINMENT	ISOLATION CHEC	CK VALVE				•••				FS-O	Q		
1-CS-444-1	1-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COC PUMP PP-45-1	LANT PUMP SEAI	L WATER IN	JECTIC	ON TO	REACTOF		OLAN	Т		FS-O	Q		
1-CS-444-2	1-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R	that the second second	Condition Monitoring Program
REACTOR COC PUMP PP-45-2	LANT PUMP SEAI	L WATER IN	JECTIC	ON TO	REACTOF	R CO(OLAN	т		FS-O	Q		
1-CS-444-3	1-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COC PUMP PP-45-3	LANT PUMP SEAL	L WATER IN	IJECTIC	ON TO	REACTOR	R CO0	DLAN	Т		FS-O	Q		
1-CS-444-4	1-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COC PUMP PP-45-4	LANT PUMP SEAL		IJECTIC	ON TO	REACTOR	R CO(DLAN	Т		FS-O	Q		
1-CS-445-1	1-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COC PUMP PP-45-1	LANT PUMP SEAI	L WATER IN	IJECTIO	ON TO	REACTOR	R COO	DLAN	Т		FS-O	Q		
1-CS-445-2	1-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COC PUMP PP-45-2	DLANT PUMP SEAI	L WATER IN	JECTIC	ON TO	REACTOP	R CO(DLAN	T		FS-O	Q		

1

Revision 4



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: RCS - Reactor Coolant System

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-CS-445-3	1-5128A (C4)	ACTIVE	3	СНК	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COO PUMP PP-45-3 (LANT PUMP SEA	L WATER IN	JECTI	ON TO	REACTO	R CO	OLAN	т		FS-O	Q		
1-CS-445-4	1-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COO PUMP PP-45-4 (LANT PUMP SEA CHECK VALVE	L WATER IN	NJECTI	ON TO	REACTOR	R CO	OLAN	Т		FS-O	Q		
1-NMO-151	1-5128A (K7)	ACTIVE	1	GAT	MO	В	3	0	Al	DIAG	1R		
PRESSURIZER	RELIEF VALVE N	RV-151 UPS	STREAM	I SHUT	FOFF VAL	VE				FSE	18M		OMN-1
1-NMO-152	1-5128A (K7)	ACTIVE	1	GAT	MO	В	3	0	A	DIAG	1R		
PRESSURIZER	RELIEF VALVE N	RV-152 UPS	STREAM	N SHUT	FOFF VAL	VE				FSE	18M		OMN-1
1-NMO-153	1-5128A (K6)	ACTIVE	1	GAT	MO	В	3	0	A	DIAG	1R		
PRESSURIZER	RELIEF VALVE N	RV-153 UPS	STREAM	N SHUT	roff val	VE				FSE	18M		OMN-1
1-NPX-151-V1	1-5128A (N8)	PASSIVE	2	GLB	MAN	A	0.5	С		LJ	OPB		
1-NPX-151 ROC	OT SHUTOFF VAL	VE											
1-NRV-151	1-5128A (K7)	ACTIVE	1	POR	AO	В	3	С	С	FSE	C		Refer to Valve Information section 3.12
PRESSURIZER	TRAIN 'B' PRESS	URE RELIE	F VAI V	F						FST	С		
				-						ST-C	С		
										ST-O	С		
										PIT	2A		
1-NRV-152	1-5128A (K7)	ACTIVE	1	PORV	AO	В	3	С	С	FSE	C		Refer to Valve Information section 3.12
PRESSURIZER	TRAIN 'B' PRESS	URE RELIE	F VALV	Έ						FST	С		
r 11										ST-C	С		
i i										ST-C B/U	С		
										ST-O	С		
										ST-O B/U	С		
										PIT	2A		

Revision 4



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Pos	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
1-NRV-153	1-5128A (K6)	ACTIVE	1	PORV	AO	В	3	С	С	FSE	С		Refer to Valve Information section 3.12
PRESSURIZER	OME-4 TRAIN 'A'	PRESSURE	RELIE		=					FST	С		
			· · · · · · · · · · · · · · · · · · ·		-					ST-C	С		
										ST-C B/U	С		
										ST-O	С		
										ST-O B/U	С		
										PIT	2A		
1-NSO-21	1-5128 (E5)	ACTIVE	2	GLB	SO	В	1	С	С	FSE	С	CSJ - 019	
REACTOR VES	SEL OME-1 POST			TRAIN '	A' SOLEN			F		FST	С	CSJ - 019	
		NOOIDEIN		· · ·			• • • • • • •	-		ST-C	С	CSJ - 019	
				•••						ST-O	С	CSJ - 019	
										PIT	2A		
1-NSO-22	1-5128 (E5)	ACTIVE	2	GLB	SO	В	1	C	C	FSE	С	CSJ - 019	
REACTOR VES	SEL OME-1 POST				A' SOLEN	י חוחו		F		FST	С	CSJ - 019	
				II VAIN			• / _ •	-		ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
										PIT	2A		
1-NSO-23	1-5128 (F5)	ACTIVE	2	GLB	SO	В	1	С	С	FSE	С	CSJ - 019	
REACTOR VES	SSEL OME-1 POST			TRAIN '	B' SOLEN			Έ		FST	С	CSJ - 019	
		/ CODEIN	•					-		ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
										PIT	2A		
1-NSO-24	1-5128 (F5)	ACTIVE	2	GLB	SO	В	1	С	С	FSE	С	CSJ - 019	
REACTOR VES	SSEL OME-1 POST			TRAIN '	B' SOI EN			Έ		FST	С	CSJ - 019	
							- / 16a V	-		ST-C	С	CSJ - 019	
e 11										ST-O	C	CSJ - 019	
4										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-NSO-61	1-5128A (M6)	ACTIVE	2	GAT	SO	B	1	С	С	FSE	С	CSJ - 019	
PRESSURIZER	OME-4 POST-ACC			N 'A' S		VAL	VF			FST	С	CSJ - 019	
										ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
										PIT	2A		
1-NSO-62	1-5128A (M6)	ACTIVE	2	GAT	SO	В	1	С	С	FSE	С	CSJ - 019	
PRESSURIZER	OME-4 POST-ACC			N 'A' S		VAL	VE			FST	С	CSJ - 019	
										ST-C	С	CSJ - 019	
										ST-O	Ċ	CSJ - 019	
					,					PIT	2A		
1-NSO-63	1-5128A (M6)	ACTIVE	2	GAT	SO	В	1	С	С	FSE	С	CSJ - 019	
PRESSURIZER	OME-4 POST-ACC			N 'B' S		VAL	VF			FST	С	CSJ - 019	
										ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
										PIT	2A		
1-NSO-64	1-5128A (M6)	ACTIVE	2	GAT	SO	B	1	С	С	FSE	C	CSJ - 019	
PRESSURIZER	OME-4 POST-ACC			IN 'B' S		VAL	VF			FST	С	CSJ - 019	
					012.10.2					ST-C	Ċ	CSJ - 019	
										ST-O	Ċ	CSJ - 019	
										PIT	2A		
1-SV-45A	1-5128A (K6)	ACTIVE	1	REL	SA	С	6	C		SVT	5A		
PRESSURIZER	OME-4 SAFETY V	'ALVE 'A'											
1-SV-45B	1-5128A (J6)	ACTIVE	1	REL	SA	С	6	C		SVT	5A		
PRESSURIZER	OME-4 SAFETY V	ALVE 'B'											
1-SV-45C	1-5128A (H6)	ACTIVE	1	REL	SA	С	6	С		SVT	5A		-
PRESSURIZER	OME-4 SAFETY V	ALVE 'C'											



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Pos	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
1-SV-50	1-5128A (H3)	ACTIVE	3	REL	SA	С	2	С		SVT	10A		
RC PUMPS SEA	AL #1 AND START RS SAFETY VALV	UP SEAL S` 'E	YSTEM	BYPAS	SS TO SE/	AL W	ATER	ł					
2-CS-442-1	2-5128A (B4)	ACTIVE	2	СНК	SA	AC	2	0		FS-C	R	ROJ - 009	Condition Monitoring Program
REACTOR COC	DLANT PUMP SEA	L WATER IN	JECTI	ON TO	RCP PP-4	15-1				LJ	R		
CONTAINMENT	ISOLATION CHE	CK VALVE								FS-O	Q		
2-CS-442-2	2-5128A (B4)	ACTIVE	2	CHK	SA	AC	2	0		FS-C	R	ROJ - 009	Condition Monitoring Program
REACTOR COC	DLANT PUMP SEA		JECTI			15-2				LJ	R		
CONTAINMENT	ISOLATION CHE	CK VALVE								FS-O	Q		
2-CS-442-3	2-5128A (B4)	ACTIVE	2	CHK	SA	AC	2	0		FS-C	R	ROJ - 009	Condition Monitoring Program
REACTOR COC	DLANT PUMP SEA		JECTI	ON TO	RCP PP-4	15-3				LJ	R		
CONTAINMENT	FISOLATION CHE	CK VALVE	02011							FS-O	Q		
2-CS-442-4	2-5128A (B4)	ACTIVE	2	CHK	SA	AC	2	0		FS-C	R	ROJ - 009	Condition Monitoring Program
REACTOR COO	NANT PLIMP SEA		UECTI		RCP PP-4	15.4				LJ	R		
CONTAINMENT	ISOLATION CHE	CK VALVE	102011	01170						FS-O	Q		
2-CS-444-1	2-5128A (C4)	ACTIVE	3	СНК	SA	C	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COC PUMP PP-45-1	OLANT PUMP SEA	L WATER II	JECTI	ON TO	REACTO	R CO	OLAN	T		FS-O	Q		
2-CS-444-2	2-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COO PUMP PP-45-2	OLANT PUMP SEA CHECK VALVE	L WATER II	NJECTI	ON TO	REACTO	R CO	OLAN	١T		FS-O	Q		
2-CS-444-3	2-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COC	OLANT PUMP SEA CHECK VALVE	L WATER II	JECTI	ON TO	REACTO	R CO	OLAN	NT.		FS-O	Q		
2-CS-444-4	2-5128A (C4)	ACTIVE	3	CHK	SA	C	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COO PUMP PP-45-4	OLANT PUMP SEA	L WATER II	NJECTI	ON TO	REACTO	R CO	OLAN	NT		FS-O	Q		
2-CS-445-1	2-5128A (C4)	ACTIVE	3	СНК	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COO PUMP PP-45-1	OLANT PUMP SEA CHECK VALVE	L WATER II	UJECTI	ON TO	REACTO	R CO	OLAN	٩T		FS-0	Q		
Revision 4				······								<u> </u>	5



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posit	ion		·····	Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-CS-445-2	2-5128A (C4)	ACTIVE	3	СНК	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COO PUMP PP-45-2 C	LANT PUMP SEAI CHECK VALVE	WATER IN	IJECTIC	ON TO	REACTOF	R COC	OLAN'	т		FS-O	Q		
2-CS-445-3	2-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COO PUMP PP-45-3 (LANT PUMP SEAI CHECK VALVE	L WATER IN	IJECTIC	ON TO	REACTOP	R CO(olan	т		FS-O	Q		
2-CS-445-4	2-5128A (C4)	ACTIVE	3	CHK	SA	С	2	0		BDT-C	R		Condition Monitoring Program
REACTOR COO PUMP PP-45-4 (LANT PUMP SEAU CHECK VALVE	L WATER IN	IJECTIO	ON TO	REACTOR	R CO(olan	т		FS-O	Q		
2-NMO-151	2-5128A (K6)	ACTIVE	1	GAT	MO	В	3	0	AI	DIAG	1R		
PRESSURIZER	RELIEF VALVE N	RV-151 UPS	STREAM	I SHUT	foff val	VE				FSE	18M		OMN-1
2-NMO-152	2-5128A (K7)	ACTIVE	1	GAT	MO	В	3	0	Al	DIAG	1R		
PRESSURIZER	RELIEF VALVE N	RV-152 UPS	STREAM	I SHUT	FOFF VAL	VE				FSE	18M		OMN-1
2-NMO-153	2-5128A (K7)	ACTIVE	1	GAT	MO	В	3	0	Al	DIAG			
PRESSURIZER	RELIEF VALVE N	RV-153 UPS	STREAM	I SHUT	Foff val	VE				FSE	18M		OMN-1
2-NPX-151-V1	2-5128A (N8)	PASSIVE	2	GLB	MAN	Α	0.5	С		LJ	OPB		
PRESSURIZER CALIBRATOR-A	DIFF PRESS IND BANDONED EQU	TRANSMIT	ter ND	I-151 [DEAD WE	IGHT							
2-NRV-151	2-5128A (K6)	ACTIVE	1	POR\	AO	В	3	С	С	FSE	C		Refer to Valve Information section 3.12
PRESSURIZER	TRAIN 'B' PRESS	URE RELIEI		Ē						FST	С		
	•									ST-C	С		
*	н.									ST-O	С		
	·									PIT	2A		

AEP AMERICAN* ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: RCS - Reactor Coolant System

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-NRV-152	2-5128A (K7)	ACTIVE	1	PORV	AO	В	3	С	С	FSE	С		Refer to Valve Information section 3.12
PRESSURIZER	TRAIN 'B' PRESS			F						FST	С		
TALOOUNIZER				-						ST-C	С		
										ST-C B/U	С		
					÷					ST-O	С		
	,									ST-O B/U	С		Ň
					,					PIT	2A		
2-NRV-153	2-5128A (K7)	ACTIVE	1	PORV	AO	В	3	С	С	FSE	С		Refer to Valve Information section 3.12
PRESSURIZER	ROME-4 TRAIN 'A'	PRESSURE	RELIE		Έ					FST	С		
					-					ST-C	С		
										ST-C B/U	С		
										ST-O	С		
										ST-O B/U	С		
										PIT	2A		
2-NSO-21	2-5128 (J6)	ACTIVE	2	GLB	SO	В	1	С	С	FSE	С	CSJ - 019	
REACTOR VES	SSEL OME-1 POST			TRAIN	'A' SOLEN			F		FST	С	CSJ - 019	
								-		ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
										PIT	2A		
2-NSO-22	2-5128 (J6)	ACTIVE	2	GLB	SO	В	1	С	С	FSE	С	CSJ - 019	
REACTOR VE	SSEL OME-1 POST	-ACCIDENT		TRAIN	'A' SOLEN		VALV	Έ		FST	С	CSJ - 019	
								_		ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
	•*									PIT	2A		
2-NSO-23	2-5128 (H6)	ACTIVE	2	GLB	SO	В	1	С	С	FSE	С	CSJ - 019	
REACTOR VE	SSEL OME-1 POST			TRAIN	'B' SOLEN			Έ		FST	С	CSJ - 019	
4					C OCEI			-		ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
										PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: RCS - Reactor Coolant System

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-NSO-24	2-5128 (H6)	ACTIVE	2	GLB	SO	В	1	С	С	FSE	С	CSJ - 019	
REACTOR VE	SSEL OME-1 POST	ACCIDENT	VENT	TRAIN	'B' SOLEN			Έ		FST	С	CSJ - 019	
					2 0011					ST-C	С	CSJ - 019	
					$(t_{i})_{i\in \mathbb{N}}$					ST-O	С	CSJ - 019	
										PIT	2A	e.	
2-NSO-61	2-5128A (M6)	ACTIVE	2	GAT	SO	В	1	С	С	FSE	С	CSJ - 019	· · · · · · · · · · · · · · · · · · ·
PRESSURIZE	R OME-4 POST-AC	CIDENT VE		IN 'A' S			VE			FST	С	CSJ - 019	
										ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
		,								PIT	2A		
2-NSO-62	2-5128A (M6)	ACTIVE	2	GAT	SO	В	1	С	С	FSE	С	CSJ - 019	• · · · · · · · · · · · · · · · · · · ·
PRESSURIZE	R OMF-4 POST-AC			IN 'A' S			VĒ			FST	С	CSJ - 019	
										ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
										PIT	2A		
2-NSO-63	2-5128A (M6)	ACTIVE	2	GAT	SO	В	1	С	C	FSE	С	CSJ - 019	
PRESSURIZE	R OME-4 POST-AC	CIDENT VE	NT TRA	IN 'B' §			VE			FST	С	CSJ - 019	
										ST-C	С	CSJ - 019	
										ST-O	С	CSJ - 019	
				•						PIT	2 A		
2-NSO-64	2-5128A (M6)	ACTIVE	2	GAT	SO	В	1	С	С	FSE	С	CSJ - 019	
PRESSURIZE	R OME-4 POST-AC			IN 'B' S			VF			FST	С	CSJ - 019	
							-			ST-C	С	CSJ - 019	
	•									ST-O	С	CSJ - 019	
	,									PIT	2A		
2-SV-45A	2-5128A (K6)	ACTIVE	1	REL	SA	С	6	С		SVT	5A		
PRESSURIZE	R OME-4 SAFETY	ALVE 'A'								ана. По 1970 г. – Стала Стала Стала (1970)			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: RCS - Reactor Coolant System

			Code					Posit	ion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments	
2-SV-45B	2-5128A (J6)	ACTIVE	1	REL	SA	С	6	С		SVT	5A			
PRESSURIZER	R OME-4 SAFETY \	ALVE 'B'			•									
2-SV-45C	2-5128A (H6)	ACTIVE	1	REL	SA	С	6	С		SVT	5A		, _t u <mark>na</mark> t _{tot} yr ann an	
PRESSURIZER	R OME-4 SAFETY \	ALVE 'C'												
2-SV-50	2-5128A (H3)	ACTIVE	3	REL	SA	С	2	С	·	SVT	10A			
RC PUMPS SE RETURN FILTI	EAL #1 AND START ERS SAFETY VALV	'UP SEAL S' /E	YSTEM	BYPAS	SS TO SE/	AL W/	ATER	ł						

9

e er.



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: RHR - Residual Heat Removal

			Code					Posi	tion		<u></u>	Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
1-ICM-111	1-5143 (J8)	ACTIVE	2	GAT	мо	В	12	O/C	AI	FSE	C	CSJ - 038	Non OMN-1	
RHR TO REACTO		OPS #2 & #		FGS		JMFN	п			ST-C	C	CSJ - 038		
ISOLATION VAL	/E									ST-O	С	CSJ - 038		
		•								PIT	2A			
1-ICM-129	1-5143 (E3)	ACTIVE	1	GAT	MO	Α	14	O/C	AI	LT	R/2A			· · · · · · · · · · · · · · · · · · ·
REACTOR COOL	ANT LOOP #2 H	OT LEG TO	RESID	JAL HE	EAT REMO)VAL	PUM	PS	,	FSE	C	CSJ - 038	OMN-1	
SUCTION CONT.	AINMENT ISOLA	TION VALVE						•		DIAG	3R			
1-IMO-128	1-5143 (D3)	ACTIVE	1	GAT	MO	Α	14	С	Al	LT	R/2A			
REACTOR COOL	ANT LOOP #2 H	OT LEG TO	RESID	JAL HE	EATREMO	VAL	PUM	PS		FSE	С	CSJ - 038	OMN-1	
SUCTION SHUT	OFF VALVE							. •		DIAG	3R			
1-IMO-310	1-5143 (G2)	ACTIVE	2	GAT	MO	В	14	0	Al	DIAG	54M			
EAST RESIDUAL	HEAT REMOVA	L PUMP PP	-35E SL		I SHUTOF	FVA	LVE			FSE	18M		OMN-1	
1-IMO-312	1-5143 (D6)	ACTIVE	2	GLB	MO	В	2	0/C	AI	DIAG	54M			·····
EAST RESIDUAL	HEAT REMOVA	L HEAT EX(CHANG	er he	-17E OUTI	LET N	/INI-F	LOW		FSE	18M		OMN-1	
1-IMO-314	1-5143 (L2)	ACTIVE	2	GAT	MO	В	8	С	Al	DIAG	6R			
EAST RESIDUAL VALVE	HEAT REMOVA	L PUMP PP	-35E DI	SCHAF	RGE CROS	SSTIE	e shu	TOFF		FSE	18M		OMN-1	•
1-IMO-320	1-5143 (G4)	ACTIVE	2	GAT	MO	В	14	0	Al	DIAG	54M	·····	······································	
WEST RESIDUA	L HEAT RÉMOV	AL PUMP PF	2-35W S	UCTIC	ON SHUTC	off V	ALVE			FSE	18M		OMN-1	
1-IMO-322	1-5143 (D9)	ACTIVE	2	GLB	MO	В	2	0/C	Al	DIAG	9A			
WEST RESIDUA	L HEAT REMOV	AL HEAT EX Ve	CHANG	ER HE	E-17W OU	TLET				FSE	18M		OMN-1	
1-IMO-324	1-5143 (L4)	ACTIVE	2	GAT	MO	В	8	С	Al	DIAG	6R			
WEST RESIDUA SHUTOFF VALV	L HEAT REMOV	AL PUMP PF	P-35W [DISCH/	ARGE CRO	DSST	IE			FSE	18M		OMN-1	· ·



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

		······	Code					Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
1-IMO-330	1-5143 (E6)	ACTIVE	2	GAT	MO	В	8	С	ÂI	DIAG	3R			
EAST RESIDUAL	HEAT REMOVAL		R CONT	AINME	ENT SPRA	Y SH	UTOF	F		FSE	18M		OMN-1	
1-IMO-331	1-5143 (F9)	ACTIVE	2	GAT	MO	В	8	C	AI	DIAG	5A			
WEST RHR TO L	IPPER CONTAIN	MENT SPR/	ay shu	TOFF	VALVE					FSE	18M		OMN-1	
1-IMO-340	1-5143 (D7)	ACTIVE	2	GAT	MO	В	8	С	Al	FSE	C	CSJ - 026	OMN-1	
EAST RESIDUAL	HEAT REMOVA	L HEAT EXC	CHANG	ER TO	CHARGIN	IG PL	IMPS			DIAG	3R			
1-IMO-350	1-5143 (D9)	ACTIVE	2	GAT	MO	В	8	С	AI	FSE	С	CSJ - 026	OMN-1	
WEST RHR HEA	T EXCHANGER (OUTLET TO	SAFET	Y INJE	CTION PL	IMP S	SUCTI	ION		DIAG	5A			
1-IRV-300	1-5143 (D7)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q			
RESIDUAL HEAT	REMOVAL HEA	T EXCHANO	SERS T	o cvc	S DEMINE	RAL	ZERS	S		FST	Q			
SHUTOFF VALV	Ε				•			- · ·		ST-C	Q			
1-IRV-310	1-5143 (E6)	ACTIVE	2	BALL	. AO	В	8	0/C	0	FSE	Q			· ·
EAST RESIDUAL	HEAT REMOVA	L HEAT EX	CHANG	ER HE	-17E OUT	LET F	LOW			FST	Q			
CONTROL VALV	E				•					ST-O	Q			
						_	•			PIT	2A			
1-IRV-320	1-5143 (E9)	ACTIVE	2	BALL	. AO	В	8	O/C	0	FSE	Q			
WEST RESIDUA	L HEAT REMOVA	AL HEAT EX	CHANG	SER HE	5-17W OU	TLET	FLO\	N		FST	Q			
CONTROL VALV	E									ST-O	Q	٠		
										PIT	2A			
,1-RH-104E	1-5143 (F1)	ACTIVE	2	GAT	MAN	В	14	0		FSE	2A			
' RECIRCULATION SUCTION SHUT	N SUMP TO EAS	T RESIDUAI	L HEAT	REMO	VAL PUM	P PP-	35E							
1-RH-104W	1-5143 (F4)	ACTIVE	2	GAT	MAN	В	14	0		FSE	2A			
RECIRCULATION	N SUMP TO WES OFF VALVE	T RESIDUA	L HEAT	REMO	OVAL PUN	IP PP	2-35W	!						



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

	The second se		Code					Pos	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
1-RH-108E	1-5143 (J1)	ACTIVE	2	СНК	SA	С	8	С		FS-C	R	CSJ - 020	
EAST RESIDUAL	HEAT REMOVA	L PUMP PP-	35E DI	SCHAR	RGE CHEC		LVE			FS-O	R	CSJ - 020	
										FS-C	С	CSJ - 020	
										FS-O	С	CSJ - 020	
1-RH-108W	1-5143 (J4)	ACTIVE	2	CHK	SA	С	8	С		FS-C	R	CSJ - 020	
WEST RHR PUM	P DISCHARGE (/E							FS-O	R	CSJ - 020	· ·
										FS-C	С	CSJ - 020	
										FS-O	С	CSJ - 020	
1-RH-121E	1-5143 (D7)	ACTIVE	2	GLB	MAN	В	2	O/C		FSE	2A		
EAST RESIDUAL	. HEAT REMOVA RS SHUTOFF VA	L HEAT EXC	HANG	er ou	TLET TO (CVCS	;						
1-RH-121W	1-5143 (D8)	ACTIVE	2	GLB	MAN	В	2	0/C		FSE	2A		
WEST RHR HEA VALVE	TEXCHANGER	OUTLET TO	CVCS	DEMIN	ERALIZEF	RS SH	IUTO	FF					
1-RH-128E	1-5143 (E7)	ACTIVE	2	GAT	MAN	Α	8	0/C		LT	R/2A	<u> </u>	
EAST RESIDUAL	. HEAT REMOVA	L HEAT EXC	HANG	ER 1-H	IE-17E TO	RC L	.00P	S #2		FSE	2 A		
1-RH-128W	1-5143 (E8)	ACTIVE	2	GAT	MAN	A	8	0/0		LT	R/2A		The synamic statement in the synamic statement is a second statement of the synamic statement is a second statement of the synamic statement is a second statement of the synamic statement of the s
WEST RESIDUA AND #3 COLD LE	L HEAT REMOV		CHANC	ER 1-1	HE-17W T	O RC	LOO	PS #2		FSE	2A		
1-RH-130	1-5143 (F7)	PASSIVE	2	GAT	MAN	Α	8	С		LT	R/2A		
RESIDUAL HEAT	REMOVAL RET	URN TO RE	FUELIN	IG WA	TER STOP	RAGE	TAN	к					
1-RH-133	1-5143 (K8)	ACTIVE	1	CHK	SA	AC	8	0/0		LT	R/2A		
RESIDUAL HEAT	REMOVAL TO F	REACTOR C	OOLAN	IT LOO	P #2 COL	D LEO	G CH	ECK		FS-C	R	ROJ - 041	
										BDT-O	С		BDT-O during Shutdown Cooling
1-RH-134	1-5143 (K8)	ACTIVE	1	CHK	SA	AC	8	O/C	;	LT	R/2A		and the second of the
RESIDUAL HEAT	REMOVAL TO F	REACTOR C	OOLAN		P #3 COL	D LE	G CH	ECK		FS-C	R	ROJ - 041	
VALVE		······							_	BDT-O	С		BDT-O during Shutdown Cooling



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-SV-102	1-5143 (H8)	ACTIVE	2	REL	SA	С	0.75	C		SVT	10A		
RESIDUAL HEAT	REMOVAL TO	REACTOR C	OOLAN		PS #2 & #	3 CO	LD LE	GS					
1-SV-103	1-5143 (E3)	ACTIVE	2	REL	SA	С	3	С		SVT	10A		
REACTOR COOL	_ANT LOOP #2 H	OT LEG TO	RESID	UAL HI	EAT REMO	OVAL	PUM	PS .					
1-SV-104E	1-5143 (G6)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		
EAST RESIDUAI VALVE	HEAT REMOVA	L HEAT EXO	CHANG	er he	-17E OUTI	LET S	SAFET	Υ					
1-SV-104W	1-5143 (F9)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		
WEST RESIDUA	L HEAT REMOV	AL HEAT EX	CHANC	BER HE	E-17W OU	TLET	SAFE	TY					
1-SV-105E	1-5143 (D1)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		
1-ICM-305 VALV	E ENCLOSURE	SAFETY VAI	.VE										
1-SV-105W	1-5143 (D4)	ACTIVE	2	REL	SA	C	2	С		SVT	10A		
1-ICM-306 VALV	E ENCLOSURE \$	SAFETY VAI	_VE					1 - A					
1-SV-344E	1-5143 (C2)	ACTIVE	2	REL	SA	AC	.75	С		LJ	OPB		
1-ICM-305 PRES	SURE EQUALIZ	ATION LINE	RELIEF	VALV	Έ					SVT	10A		
1-SV-344W	1-5143 (C4)	ACTIVE	2	REL	SA	AC	.75	С		IJ	OPB		
1-ICM-306 PRES	SURE EQUALIZ	ATION LINE	RELIEF	VALV	Έ					SVT	10A		
, 2-ICM-111	2-5143 (J8)	ACTIVE	2	GAT	MO	В	12	O/C	Al	FSE	C	CSJ - 038	Non OMN-1
RHR TO REACT	OR COOLANT LO	DOPS #2 & #	#3 COLI	D LEGS	S CONTAI	NME	T			ST-C	С	CSJ - 038	
ISOLATION VAL	VE									ST-O	С	CSJ - 038	
			_							PIT	2A		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code			
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments	
2-ICM-129	2-5143 (E3)	ACTIVE	1	GAT	MO	Α	14	O/C	Al	LT	R/2A				
REACTOR COOL	ANT LOOP #2 HO	DT LEG TO	RESID	JAL HE	EAT REMC	VAL	PUM	PS		FSE	C	CSJ - 038	OMN-1		
SUCTION CONTA	INMENT ISOLAT	ION VALVE							DIAG	3R					
2-IMO-128	2-5143 (D3)	ACTIVE	1	GAT	MO	A	Al	LT	R/2A						
REACTOR COOL	ANT LOOP #2 HO	OT LEG TO	RESID	JAL HE	EAT REMO	VAL	PUM	PS		FSE	С	CSJ - 038	OMN-1		
SUCTION SHUTC	FF VALVE									DIAG	2R	а. С			
2-IMO-310	2-5143 (G2)	ACTIVE	2	GAT	MO	В	14	0	Al	DIAG	54M				
EAST RESIDUAL	HEAT REMOVAL	PUMP PP-	35E SU		N SHUTOF	F VA	LVE			FSE	18M		OMN-1		
2-IMO-312	2-5143 (D6)	ACTIVE	2	GLB	MO	В	2	0/C	Al	DIAG	9A				
EAST RESIDUAL	HEAT REMOVAL	HEAT EXC	CHANG	er he	-17E OUTI	ET N	11NI-F	LOW		FSE	18M		OMN-1		
2-IMO-314	2-5143 (L2)	ACTIVE	2	GAT	MO	В	8	O/C	AI	DIAG	9A				
EAST RESIDUAL VALVE	HEAT REMOVAL	PUMP PP	-35E DI	SCHAF	RGE CROS	SSTIE	SHL	JTOFF		FSE	18M		OMN-1		
2-IMO-320	2-5143 (G4)	ACTIVE	2	GAT	MO	В	14	0	Al	DIAG	4A				
WEST RESIDUAL	HEAT REMOVA	l pump pp	2-35W S	UCTIC	ON SHUTO	FF V	ALVE	2		FSE	18M		OMN-1		
2-IMO-322	2-5143 (D9)	ACTIVE	2	GLB	MO	В	2	O/C	Al	DIAG	8A			······	
WEST RESIDUAL MINI-FLOW LINE	HEAT REMOVA	L HEAT EX E	CHANG	ier He	E-17W OU ⁻	TLET				FSE	18M		OMN-1		
2-IMO-324	2-5143 (L4)	ACTIVE	2	GAT	MO	В	8	O/C	AI	DIAG	3R				
WEST RESIDUAL	HEAT REMOVA	l pump pp	9-35W E	ISCH/	ARGE CRO	OSST	E			FSE	18M		OMN-1		
2-IMO-330	2-5143 (E6)	ACTIVE	2	GAT	MO	В	8	С	Al	DIAG	54M			nn , 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2 111, 2011,	
EAST RESIDUAL	HEAT REMOVAL	TO UPPE	R CONT	'AINME	ENT SPRA	Y SH	υτοι	FF		FSE	18M		OMN-1		
2-IMO-331	2-5143 (F9)	ACTIVE	2	GAT	MO	В	8	С	AI	DIAG	4A				
WEST RHR TO U	IPPER CONTAIN	MENT SPR/	AY SHU	TOFF	VALVE					FSE	18M		OMN-1		



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

		•	Code		· = ·			Posi	tion			Code		· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
2-IMO-340	2-5143 (D7)	ACTIVE	2	GAT	MO	В	. 8	С	Al	FSE	С	CSJ - 026	OMN-1	
EAST RESIDUA	L HEAT REMOVA	L HEAT EXC	CHANGI	ER TO	CHARGIN	IG PL	IMPS			DIAG	3R			· · · ·
2-IMO-350	2-5143 (D9)	ACTIVE	2	GAT	MO	В	8	С	AI	FSE	С	CSJ - 026	OMN-1	
WEST RHR HE	AT EXCHANGER (VE	OUTLET TO	SAFET	Y INJE	CTION PL	JMP S	SUCT	ION		DIAG	1R			
2-IRV-300	2-5143 (D7)	ACTIVE	2	GLB	AO	В	2	O/C	С	FSE	Q			
RESIDUAL HEA	T REMOVAL HEA	T EXCHANO	SERS T	o cvc	S DEMINE	RAL	ZER	5		FST	Q			
SHUTOFF VAL	VE				•			-		ST-C	Q			
2-IRV-310	2-5143 (E6)	ACTIVE	2	BALL	. AO	В	8	O/C	0	FSE	Q			·
EAST RESIDUA	L HEAT REMOVA		CHANG	er he	-17E OUT	LET F	LOW	,		FST	Q			
CONTROL VAL	VE									ST-O	Q			
										PIT	2A			
2-IRV-320	2-5143 (E9)	ACTIVE	2	BALL	AO	В	8	O/C	0	FSE	Q			
WEST RESIDU	AL HEAT REMOV	AL HEAT EX	CHANG	SER HE	E-17W OU	TLET	FLO	w .		FST	Q			
CONTROL VAL	VE									ST-O	Q			
										PIT	2A			
2-RH-104E	2-5143 (F1)	ACTIVE	2	GAT	MAN	В	14	0		FSE	2A			·
RECIRCULATION SHU	ON SUMP TO EAS	T RESIDUAI	L HEAT	REMO	VAL PUM	P PP-	35E							
2-RH-104W	2-5143 (F4)	ACTIVE	2	GAT	MAN	В	14	0		FSE	2A			
RECIRCULATION SHU	ON SUMP TO WES	ST RESIDUA	L HEAT	REMO		IP PP	P-35₩	/						
, 2-RH-108E	2-5143 (J1)	ACTIVE	2	CHK	SA	С	8	С		FS-C	R	CSJ - 020		
'EAST RESIDU	AL HEAT REMOVA	L PUMP PP	-35E DI	SCHA	RGE CHE		LVE			FS-O	R	CSJ - 020		
< <u>(1</u>							_			FS-C	С	CSJ - 020		
. 4										FS-O	С	CSJ - 020		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Positi	ion			Code	
Component	PID(Coord)	Function	Class	Турө	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-RH-108W	2-5143 (J4)	ACTIVE	2	СНК	SA	С	8	С		FS-C	R	CSJ - 020	
WEST RHR PUM	P DISCHARGE C		VE							FS-O	R	CSJ - 020	
										FS-C	С	CSJ - 020	·
										FS-O	С	CSJ - 020	
2-RH-121E	2-5143 (D7)	ACTIVE	2	GLB	MAN	В	2	O/C		FSE	2A		
EAST RESIDUAL	. HEAT REMOVA	L HEAT EXC	CHANG	ER OU	TLET TO C	CVCS						•	
2-RH-121W	2-5143 (D8)	ACTIVE	2	GLB	MAN	В	2	O/C		FSE	2A		
WEST RHR HEA VALVE	T EXCHANGER (OUTLET TO	CVCS	DEMIN	ERALIZEF	rs sf	IUTO	FF			•		
2-RH-128E	2-5143 (E7)	ACTIVE	2	GAT	MAN	Α	8	O/C		LT	R/2A		· · · · · · · · · · · · · · · · · · ·
EAST RESIDUAL AND #3 COLD LE	. HEAT REMOVA EGS SHUTOFF V	L HEAT EX(ALVE	CHANG	ER 2-H	E-17E TO	RC L	.00P	S #2		FSE	2A		
2-RH-128W	2-5143 (E8)	ACTIVE	2	GAT	MAN	A	8	O/C		LT	R/2A		
WEST RESIDUA AND #3 COLD LE	L HEAT REMOVA	AL HEAT EX ALVE	CHANG	ER 2-ł	HE-17W T	O RC	L00	PS #2		FSE	2A		
2-RH-130	2-5143 (F7)	PASSIVE	2	GAT	MAN	A	8	С		LT	R/2A		
RESIDUAL HEAT TK-33 SHUTOFF	TREMOVAL RET	URN TO RE	FUELIN	ig wa [.]	TER STOP	RAGE	TAN	K					
2-RH-133	2-5143 (K8)	ACTIVE	1	CHK	SA	AC	8	O/C		LT	R/2A		
RESIDUAL HEAT		REACTOR C			P #2 COL	DLE	G CH	ЕСК		FS-C	R	ROJ - 041	
VALVE										BDT-O	С		BDT-O during shutdown cooling
2-RH-134	2-5143 (K8)	ACTIVE	1	CHK	SA	AC	8	O/C		LT	R/2A		
RESIDUAL HEAT		REACTOR C			P #3 COL	D LE	G CH	ECK		FS-C	R	ROJ - 041	
VALVE										BDT-O	С		BDT-O during shutdown cooling
2-SV-102	2-5143 (H8)	ACTIVE	2	REL	SA	С	0.75	i C		SVT	10A	<u> </u>	
RESIDUAL HEAT	REMOVAL TO F		OOLAN)PS#2 & #	3 CO		EGS					



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: RHR - Residual Heat Removal

			Code					Pos	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm	. Fail.	Test	Freq	Dev.	Comments
2-SV-103	2-5143 (F3)	ACTIVE	2	REL	SA	С	3	С		SVT	10A		
REACTOR COO SAFETY VALVE	LANT LOOP #2 H	OT LEG TO	RESID	JAL HE	EATREMO	OVAL	PUM	PS					
2-SV-104E	2-5143 (G6)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		
EAST RESIDUA	L HEAT REMOVA	L HEAT EXC	CHANG	er he	-17E OUTI	LET S	AFE	ſY			:		
2-SV-104W	2-5143 (F9)	ACTIVE	2	REL	SA	С	2	С		SVT	10A	· · · · · · · · · · · · · · · · · · ·	
WEST RESIDUA	L HEAT REMOV	AL HEAT EX	CHANG	ER HE	E-17W OU	TLET	SAFE	ΞTY					
2-SV-105E	2-5143 (D1)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		
2-ICM-305 VALV	E ENCLOSURE	SAFETY VAL	.VE										
2-SV-105W	2-5143 (D4)	ACTIVE	2	REL	SA	С	2	С		SVT	10A		· · · · · · · · · · · · · · · · · · ·
2-ICM-306 VALV	E ENCLOSURE	SAFETY VAL	.VE										
2-SV-344E	2-5143 (C2)	ACTIVE	2	REL	SA	A/C	.75	С	<u> </u>	LJ	OPB		
2-ICM-305 PRE	SSURE EQUALIZ	ATION LINE	RELIEF	VALV	Έ					SVT	10A		
2-SV-344W	2-5143 (C4)	ACTIVE	2	REL	SA	A/C	.75	С		LJ	OPB		
2-ICM-306 PRE	SSURE EQUALIZ	ATTION LINI	E RELIE		VE					SVT	10A		

*2



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SI - Safety Injection

			Code					Posi	tion			Code		······································
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
1-ICM-250	1-5142 (H2)	ACTIVE	1	GAT	MO	Α	4	С	AI	IJ	OPB			
BORON INJEC	TION TANK TRAIN	'A' OUTLET			NT ISOLA	TION		E		DIAG	3R			
								_		FSE	18M		OMN-1	
1-ICM-251	1-5142 (H3)	ACTIVE	1	GAT	MO	A	4	С	AI	LJ	OPB			
BORON INJEC	TION TANK TRAIN	'B' OUTLET	CONT	AINMEI	NT ISOLA	TION	VALV	E		DIAG	3R			
								_		FSE	18M		OMN-1	
1-ICM-260	1-5142 (C9)	ACTIVE	2	GAT	MO	Α	4	0	Al	LJ	OPB			
NORTH SAFET	Y INJECTION PUN	IP PP-26N D	DISCHA	RGE C	ONTAINM	ENT				DIAG	6R			
ISOLATION VA	LVE									FSE	18M		OMN-1	
1-ICM-265	1-5142 (C8)	ACTIVE	2	GAT	MO	A	4	0	Al	IJ	OPB			
SOUTH SAFET	Y INJECTION PUN	AP PP-26S D	DISCHA	RGE C	ONTAINM	ENT		TION		DIAG	4R			
VALVE										FSE	18M		OMN-1	
1-ICM-305	1-5143 (C1)	ACTIVE	2	GAT	MO	Α	18	С	Al	LJ	OPB			
RECIRCULATIO	ON SUMP TO EAS	T RHR/CTS	PUMPS	SUCT			MENT			DIAG	3R			
ISOLATION VA	LVE									FSE	18M		OMN-1	
1-ICM-306	1-5143 (C4)	ACTIVE	2	GAT	MO	Α	18	С	AI	LJ	OPB			
RECIRCULATIO	ON SUMP TO WES	ST RHR/CTS		s suc		TAIN	MENT			DIAG	3R			
ISOLATION VA	LVE									FSE	18M		OMN-1	
1-ICM-311	1-5143 (G6)	ACTIVE	2	GAT	MO	В	8	0	AI	FSE	18M		OMN-1	
EAST RESIDU	AL HEAT REMOVA	L TO RC LO	OPS #		#4 HOT LE	GS				DIAG	10A			
CONTAINMEN	T ISOLATION VALV	VE												
1-ICM-321	1-5143 (G9)	ACTIVE	2	GAT	MO	В	8	0	Al	FSE	18M		OMN-1	
WEST RHR TO	REACTOR COOL	ANT LOOPS	6 #2 AN	D #3 H	OTLEGS	CON	TAINM	ENT		DIAG	10A			
ISOLATION VA	LVE													
' 1-IMO-110	1-5143A (B6)	PASSIVE	2	GAT	MÔ	В	10	0	AI	PIT	2A			
ACCUMULATO	R TANK OME-6-1	OUTLET VA	LVE											
1-IMO-120	1-5143A (L6)	PASSIVE	2	GAT	МО	В	10	0	AI	PIT	2A	,	<u> </u>	
ACCUMULATO	R TANK OME-6-2	OUTLET VA	LVE											

1

Revision 4


Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code		_	نن ا مہم ا		Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments	
1-IMO-130	1-5143A (H6)	PASSIVE	2	GAT	МО	B	10	0	AI	PIT	2A		·	
ACCUMULATOR	TANK OME-6-3	OUTLET VAL	VE	•										
1-IMO-140	1-5143A (E6)	PASSIVE	2	GAT	MO	В	10	0	Al	PIT	2A			
ACCUMULATOR	TANK OME-6-4	OUTLET VAI	VE									·	· · · · · · · · · · · · · · · · · · ·	
1-IMO-255	1-5142 (J7)	ACTIVE	2	GAT	MO	В	4	C	AI	FSE	С	CSJ - 039	OMN-1	
BORON INJECT	ION TANK TRAIN	'A' INLET SI	HUTOF	F VAL	/E					DIAG	3R			
1-IMO-256	1-5142 (J6)	ACTIVE	2	GAT	MO	В	4	С	Al	FSE	C	CSJ - 039	OMN-1	
BORON INJECT	ION TANK TRAIN	'B' INLET SI	HUTOF	F VAL	/E					DIAG	3R			
1-IMO-261	1-5142 (M8)	ACTIVE	2	GAT	MO	A	8	0	Al	LT	R	REL - 002		. <u> </u>
REFUELING WA	TER STORAGE	TANK TK-33	SUPPL	Y TO S	SAFETY IN	JEC	ΓΙΟΝ			FSE	С	CSJ - 021	OMN-1	
PUMPS SHUTO	FF VALVE									DIAG	6R			
1-IMO-262	1-5142 (L8)	ACTIVE	2	GLB	MO	A	2	0	AI	LT	R			
SAFETY INJECT	TION PUMPS REC	IRC TO REP			FER STOR	AGE	TAN	<		FSE	С	CSJ - 022	OMN-1	
TK-33 TRAIN 'A'	SHUTOFF VALV	Ξ	•==••	•••••				•		DIAG	3R			
1-IMO-263	1-5142 (L8)	ACTIVE	2	GLB	MO	A	2	0	AI	LT	R			
SAFETY INJECT	TION PUMPS REC	RC TO REI		IG WAT	FER STOR	AGE	TAN	ĸ		FSE	С	CSJ - 022	OMN-1	
TK-33 TRAIN 'B'	SHUTOFF VALV	E	•====					-		DIAG	3R			
1-IMO-270	1-5142 (E9)	ACTIVE	2	GAT	MO	В	4	0	AI	DIAG	9A			
SAFETY INJECT	FION PUMPS DIS	CHARGE CF	ROSSTI	E TRA	IN 'A' SHU	TOFF	VAL	VE		FSE	18M		OMN-1	
1-IMO-275	1-5142 (E8)	ACTIVE	2	GAT	MO	В	4	0	Al	DIAG	9A			
SAFETY INJECT	TION PUMPS DIS	CHARGE CF	ROSSTI	E TRA	IN 'B' SHU	TOFF	VAL	VE		FSE	18M		OMN-1	
1-IMO-315	1-5143 (K6)	ACTIVE	1	GAT	MO	В	8	C	Al	FSE	С	CSJ - 023	OMN-1	
EAST RHR AND AND #4 HOT LE	NORTH SAFETY GS SHUTOFF VA	INJECTION	TO RE	ACTO			OPS	#1		DIAG	3R			



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	_		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments	
1-IMO-316	1-5143 (K6)	ACTIVE	2	GAT	MO	В	8	0	AI	FSE	С	CSJ - 024	OMN-1		
EAST RHR AND	D NORTH SAFETY LEGS SHUTOFF V	INJECTION	TO RE	ACTO	R COOLAN	IT LO	OPS	#1		DIAG	3R				
1-IMO-325	1-5143 (K9)	ACTIVE	1	GAT	MO	В	8	C	Al	FSE	С	CSJ - 023	OMN-1		
WEST RHR AN AND #3 HOT LI	ID SOUTH SAFET EGS SHUTOFF VA	(INJECTION	n to re	EACTO	RCOOLA	NT LO	DOPS	# 2		DIAG	3R				
1-IMO-326	1-5143 (K9)	ACTIVE	2	GAT	MO	В	8	0	Al	FSE	C	CSJ - 024	OMN-1		
WEST RHR AN AND #3 COLD	ID SOUTH SAFET LEGS SHUTOFF V	/ INJECTION ALVE	n to re	EACTO	R COOLA	NTLO	DOPS	5 # 2		DIAG	3R				
1-IMO-360	1-5129 (H6)	ACTIVE	2	GAT	MO	В	4	0	Al	DIAG	6R				
SAFETY INJEC	TION PUMPS TO (UTOFF VALVE	CVCS CHAF	rging f	PUMPS	SUCTION	N HEA	DER			FSE	18M		OMN-1		
1-IMO-361	1-5142 (G9)	ACTIVE	2	GAT	MO	В	4	С	AI	DIAG	5A				
SAFETY INJEC	TION PUMPS SUC	CTION TO A	ND FRC	M CH/	ARGING P	UMP	S .			FSE	18M		OMN-1		
1-IMO-362	1-5142 (G9)	ACTIVE	2	GAT	MO	В	4	C	AI	DIAG	54M				
SAFETY INJECTION TRA	TION PUMPS SUC IN 'B' SHUTOFF V/	CTION TO A		M CH	ARGING P	UMP	Ś			FSE	18M		OMN-1		_
1-IMO-390	1-5143 (F2)	ACTIVE	2	GAT	MO	В	12	0	Al	FSE	С	CSJ - 028	OMN-1		
REFUELING W	ATER STORAGE	TANK TK-33 .VE	TO RE	SIDUA	L HEAT RI	EMO\	/AL			DIAG	3R				
1-IMO-51	1-5142 (E2)	ACTIVE	2	GLB	MO	В	1.5	0	AI	FSE	С	CSJ - 029	Non OMN-1		
BORON INJEC	TION TO REACTO	R COOLAN	T LOOP	#1 SH	UTOFF VA	ALVE				ST-C	С				
·•	•									ST-O	С	CSJ - 029			
Í	· · · · · · · · · · · · · · · · · · ·									PIT	<u>2A</u>				
1-IMO-52	1-5142 (D2)	ACTIVE	2	GLB	MO	В	1.5	0	AI	FSE	С	CSJ - 029	Non OMN-1		
BORON INJEC	TION TO REACTO	R COOLAN	T LOOP	#2 SH	UTOFF VA	ALVE				ST-C	C				
										ST-O	C	CSJ - 029			
										PIT	2A				_



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

·			Code					Posi	tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
1-IMO-53	1-5142 (C2)	ACTIVE	2	GLB	MO	В	1.5	0	Al	FSE	С	CSJ - 029	Non OMN-1	
BORON INJECT	ION TO REACTO		100P	#3 SH						ST-C	С			
Dentent intelet			200.							ST-O	C	CSJ - 029		
										PIT	2A			
1-IMO-54	1-5142 (F2)	ACTIVE	2	GLB	MO	В	1.5	0	AI	FSE	С	CSJ - 029	Non OMN-1	
BORON INJECT	ION TO REACTO	R COOLANT		#4 SH						ST-C	С			
										ST-O	С	CSJ - 029		
					•					PIT	2A			
1-IMO-910	1-5129 (L5)	ACTIVE	2	GAT	MO	Α	8	С	AI	LT	R	REL - 002		
REFUELING WA	ATER STORAGE 1	TANK TO CV	CS CH	ARGIN	G PUMPS	SUC				DIAG	54M			
HEADER TRAIN	I'A' SHUTOFF VA	LVE	00 01.		, , , , , , , , , , , , , , , , , , ,					FSE	18M		OMN-1	
1-IMO-911	1-5129 (L6)	ACTIVE	2	GAT	MO	A	8	C	AI	LT	R	REL - 002		
REFUELING W	ATER STORAGE 1	TANK TO CV	CS CH	ARGIN	G PUMPS	SUC				DIAG	54M			
HEADER TRAIN	I 'B' SHUTOFF VA	LVE	00 01.							FSE	18M		OMN-1	
1-IRV-110	1-5143A (B6)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A			· · · · · · · · · · · · · · · · · · ·
ACCUMULATOR	R TANK OME-6-1	DRAIN VALV	/E											
1-IRV-111	1-5143A (C5)	PASSIVE	2	GLB	AO	В	1	C	C	PIT	2A			
ACCUMULATOR	R TANK OME-6-1	FILL LINE C	ONTRO	L VAL	VE									
1-IRV-120	1-5143A (L6)	PASSIVE	2	GLB	AO	В	0.75	5 C	С	PIT	2A	<u></u>	<u></u>	· <u>······</u> ·····························
ACCUMULATO	R TANK OME-6-2	DRAIN VAL\	/E											
1-IRV-121	1-5143A (M5)	PASSIVE	2	GLB	AO	В	1	C	С	PIT	2A			
ACCUMULATO	R TANK OME-6-2	FILL LINE C	ONTRO	L VAL	VE							·		
1-IRV-130	1-5143A (H6)	PASSIVE	2	GLB	AO	В	1.	С	С	PIT	2A			·····
ACCUMULATO	R TANK OME-6-3	DRAIN VAL	/E											



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SI - Safety Injection

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-IRV-131	1-5143A (J5)	PASSIVE	2	GLB	AO	В	-1	С	С	PIT	2A		
ACCUMULATOR	TANK OME-6-3 F	FILL LINE CO	ontro	L VAL\	/E								
1-IRV-140	1-5143A (E6)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
ACCUMULATOR	TANK OME-6-4	DRAIN VALV	/E										
1-IRV-141	1-5143A (F5)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
ACCUMULATOR	TANK OME-6-4 P	FILL LINE C	ONTRO	L VAL\	/E								
1-IRV-147	1-5143A (M8)	PASSIVE	2	GLB	AO	В	0.75	C	С	PIT	2A		
WEST RHR AND AND #3 TEST VA	SOUTH SAFETY	'INJECTION	n to re	ACTO	R COOLA	NT LO	OOPS	#2					
1-IRV-148	1-5143A (M9)	PASSIVE	2	GLB	AO	В	0.75	С	С	PIT	2A		
EAST RHR AND AND #4 TEST VA	NORTH SAFETY	INJECTION	TO RE	ACTOF	R COOLAI	NT LC	OPS	#1			×		
1-IRV-149	1-5143A (M9)	PASSIVE	2	GLB	AO	В	0.75	C	С	PIT	2A	<u> </u>	
WEST RESIDUA TEST VALVE	L HEAT REMOVA	L TO REAC	TOR C	OOLAN	IT LOOPS	#2 A	ND #	3					
1-IRV-150	1-5143A (M9)	PASSIVE	2	GLB	AO	В	0.75	C	С	PIT	2A		
EAST RESIDUAL	. HEAT REMOVA	L TO REAC	TOR CO	OLAN	T LOOPS	#1 Al	ND #4	•					
1-IRV-260	1-5142 (D9)	PASSIVE	2	GLB	AO	В	0.75	C	С	PIT	2A	· • • • • • • • • • • • • • • • • • • •	
SAFETY INJECT	ION TEST LINE S	HUTOFF V	ALVE					ı .					
1-IRV-50	1-5142 (D3)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
BORON INJECT	ON TO ACCUMU	LATOR FILI	LINE	CONTR	OL VALV	E ·							
1-IRV-60	1-5142 (B8)	PASSIVE	2	GLB	AO	В	1	С	С	PIT	2A		
SAFETY INJECT	ION TO ACCUM	JLATOR FIL		CONTE	ROL VALV	Έ							

Revision 4

AED AMERICAN* ELECTRIC POWER

Donald C. Cook Nuclear Plant IST Program

Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SI - Safety Injection

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
1-SI-101	1-5142 (L8)	ACTIVE	2	СНК	SA	AC	8	С	•.	FS-C	R	ROJ - 019	
REFUELING WAT	TER STORAGE T	ANK TK-33	SUPPL	у то s	SAFETY IN	UEC1				FS-O	R	ROJ - 019	
PUMPS SUCTION	CHECK VALVE									LT	R		
1-SI-103N	1-5142 (F9)	ACTIVE	2	GAT	MAN	В	6	0		FSE	2A		
NORTH SAFETY	INJECTION PUM	ip pp-26n s	SUCTIO	N SHU	Toff val	VE							
1-SI-103S	1-5142 (K9)	ACTIVE	2	GAT	MAN	В	6	0		FSE	2A		· · · · · · · · · · · · · · · · · · ·
SOUTH SAFETY	INJECTION PUM	P PP-26S S		N SHU		VF							
0001110/11211											:		
1-SI-104N	1-5142 (E9)	ACTIVE	2	CHK	SA	С	0.75	5 C		BDT-C	R		
NORTH SAFETY CHECK VALVE	INJECTION MINI	-FLOW TO	REFUE	LING V	VATER ST	ORA	GE T.	ANK		FS-O	Q		
1-SI-104S	1-5142 (H9)	ACTIVE	2	CHK	SA	С	0.75	5 C		BDT-C	R	·······	
SOUTH SAFETY TK-33 CHECK VA	INJECTION MINI	-FLOW TO	REFUE	LING V	VATER ST	ORA	GE T	ANK		FS-O	Q		
1-SI-106N	1-5142 (E9)	ACTIVE	2	GLB	MAN	В	0.75	5 0	-	FSE	2A		
NORTH SAFETY TANK SHUTOFF	INJECTION PUN VALVE	IP MINI-FLC	W TO I	REFUE	LING WA	TER	STOR	AGE					
1-SI-106S	1-5142 (J9)	ACTIVE	2	GLB	MAN	В	0.75	5 0		FSE	2A		
SOUTH SAFETY TANK TK-33 SHU	INJECTION PUN	IP MINI-FLC	NŴ TO F	REFUE	LING WA	TER S	STOR	AGE					
1-SI-110N	1-5142 (E9)	ACTIVE	2	CHK	SA	С	4	С		FS-C	R		
NORTH SAFETY	INJECTION PUN	IP PP-26N [DISCHA	RGE H		HECI	< VAL	.VE		FS-O	R	ROJ - 011	
, 1-SI-110S	1-5142 (H9)	ACTIVE	2	СНК	SA	С	4	С		FS-C	R		
SOUTH SAFETY	INJECTION PUN	IP PP-26S E	DISCHA	RGE H	EADER C	HECH	K VAL	VE		FS-O	R	ROJ - 011	
1-SI-142-L1	1-5142 (C1)	ACTIVE	1	CHK	SA	С	1.5	С		FS-C	R	ROJ - 012	
BORON INJECTI	ON TO REACTO	R COOLANT	r loop	#1 CC	LD LEG C	HEC	K VÁ	LVE		FS-O	R	ROJ - 012	

Revision 4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Pos	sition	<u> </u>		Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Nom	n. Fail.	Test	Freq	Dev.	Comments
1-SI-142-L2	1-5142 (C1)	ACTIVE	1	СНК	SA	С	1.5	С		FS-C	R	ROJ - 012	
BORON INJECT	TION TO REACTO	R COOLANT	LOOP	#2 CO	LD LEG C	HECI	K VAL	VE		FS-O	R	ROJ - 012	
1-SI-142-L3	1-5142 (C2)	ACTIVE	1	СНК	SA	С	1.5	С		FS-C	R	ROJ - 012	· · · · · · · · · · · · · · · · · · ·
BORON INJECT	TION TO REACTO	R COOLANT	LOOP	#3 CO	DLD LEG C	HEC	K VAL	VE	÷	FS-O	R	ROJ - 012	
1-SI-142-L4	1-5142 (C1)	ACTIVE	1	СНК	SA	С	1.5	С		FS-C	R	ROJ - 012	
BORON INJECT	TION TO REACTO	R COOLANT	r loop	#4 CO	LD LEG C	HEC	K VAL	VE		FS-O	R	ROJ - 012	
1-SI-148	1-5143 (F2)	ACTIVE	2	СНК	SA	С	12	C		BDT-C	R		
REFUELING W	ATER STORAGE	TANK TK-33	TO RE	SIDUA	l heat r	EMO	/AL			FS-O	R	ROJ - 013	
1-SI-151E	1-5143 (H6)	ACTIVE	2	CHK	SA	AC	8	C		LT	R/2A	······	
EAST RESIDUA	AL HEAT REMOVA	AL TO REAC	TOR CO	OOLAN	IT LOOPS	#1 Al	ND #4	1		FS-C	R	ROJ - 022	LT
CHECK VALVE		_				•				FS-0	R	ROJ - 022	
1-SI-151W	1-5143 (H9)	ACTIVE	2	CHK	K SA	AC	8	Ć		LT	R/2A		
WEST RHR TO	REACTOR COOL	ANT LOOPS	5 #2 & #	3 CHE	CK VALVE	Ξ				FS-C	R	ROJ - 022	LT
·										FS-0	R	ROJ - 022	
1-SI-152N	1-5143 (H7)	ACTIVE	2	CHK	s SA	AC	4	С		LT	R/2A		
NORTH SAFET	Y INJECTION TO	REACTOR C	COOLAI	NT LOC	OPS#1 AN	ND #4	CHE	СК		FS-C	R	ROJ - 011	Condition Monitoring Program
VALVE										FS-0	R	ROJ - 011	NIE
1-SI-152S	1-5143 (H9)	ACTIVE	2	CHK	K SA	AC	4	С		LT	R/2A		
SOUTH SAFET	Y INJECTION TO	REACTOR C	OOLA	NT LOC	OPS#2 AN	ID #3	CHE	СК		FS-C	R	ROJ - 011	Condition Monitoring Program
VALVE	••••••••••••••••••••••••••••••••••••••									FS-O	R	ROJ - 011	NIE
1-SI-158-L1	1-5143 (M7)	ACTIVE	1	CHK	K SA	AC	6	Ċ		LT	R/2A		
EAST RHR AND	D NORTH SAFET	Y INJECTION	I TO RE	ACTO	R COOLA	NT LO	DOP #	¥1		FS-C	R	ROJ - 014	LT
HOT LEG CHE	CK VALVE									FS-O	R	ROJ - 014	
1-SI-158-L2	1-5143 (M9)	ACTIVE	1	CHK	(SA	AC	6	С		LT	R/2A		
WEST RHR AN	ID SOUTH SAFET	Y INJECTIO	N TO R	EACTO			OOP	#2		FS-C	R	ROJ - 014	LT
HOT LEG CHE	CK VALVE									FS-O	R	ROJ - 014	
Revision 4				-							· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Positio	on			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. F	Fail.	Test	Freq	Dev.	Comments
1-SI-158-L3	1-5143 (M9)	ACTIVE	1	СНК	SA	AC	6	С		LT	R/2A		
WEST RHR AN	D SOUTH SAFETY	INJECTION	TO RE	ACTO)OP #	3		FS-C	R	ROJ - 014	LT
HOT LEG CHEC	CK VALVE							•		FS-O	R	ROJ - 014	
1-SI-158-L4	1-5143 (M6)	ACTIVE	1	CHK	SA	AC	6	С		LT	R/2A		<u> </u>
EAST RHR AND	NORTH SAFETY	INJECTION	TO RE	ACTOF			OP #	4		FS-C	R	ROJ - 014	LT
HOT LEG CHEC	CK VALVE							•		FS-O	R ·	ROJ - 014	
1-SI-161-L1	1-5143 (L6)	ACTIVE	1	CHK	SA	AC	6	С		LT	R/2A		······································
EAST RHR AND	NORTH SAFETY	INJECTION	TO RE	ACTOF			OP #	1		FS-C	R	ROJ - 014	LT
COLD LEG CHE	ECK VALVE							-		FS-O	R	ROJ - 014	
1-SI-161-L2	1-5143 (L8)	ACTIVE	1	CHK	SA	AC	6	С		LT	R/2A		
WEST RHR & S	SOUTH SAFETY IN	JECTION TO	D REAC	TORC			P #2 (FS-C	R	ROJ - 014	LT
LEG CHECK VA	ALVE									FS-O	R	ROJ - 014	
1-SI-161-L3	1-5143 (L9)	ACTIVE	1	CHK	SA	AC	6	C		LT	R/2A		
WEST RHR & S	SOUTH SAFETY IN	JECTION TO	O REAC	TOR C		LOOF	2 #3 C			FS-C	R	ROJ - 014	LT
LEG CHECK VA	ALVE									FS-O	R	ROJ - 014	
1-SI-161-L4	1-5143 (L6)	ACTIVE	1	CHK	SA	AC	6	С		LT	R/2A		
EAST RHR AND	O NORTH SAFETY	INJECTION	TO RE	ACTOF			OP #	4		FS-C	R	ROJ - 014	LT
COLD LEG CH	ECK VALVE							•		FS-O	R	ROJ - 014	
1-SI-166-1	1-5143A (B7)	ACTIVE	1	CHK	SA	AC	10	C		LT	R/2A		
ACCUMULATO	R TANK OME-6-1	DISCHARGE	E CHEC		/E					FS-C	R	ROJ - 034	Condition Monitoring Program
	· · · · · · · · · · · · · · · · · · ·									FS-O	R	ROJ - 034	
1-SI-166-2	1-5143A (L7)	ACTIVE	1	CHK	SA	AC	10	С		LT	R/2A		
ACCUMULATO	R TANK OME-6-2	DISCHARGE			/E					FS-C	R	ROJ - 034	Condition Monitoring Program
יייי	* ,									FS-O	R	ROJ - 034	
' 1-SI-166-3	1-5143A (H7)	ACTIVE	1	CHK	SA	AC	10	С		LT	R/2A		
ACCUMULATO	R TANK OME-6-3	DISCHARGE	E CHEC		/E					FS-C	R	ROJ - 034	Condition Monitoring Program
										FS-O	R	ROJ - 034	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SI - Safety Injection

			Code					Pos	ition			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Nom	n. Fail.	Test	Freq	Dev.	Comments
1-SI-166-4	1-5143A (E7)	ACTIVE	1	СНК	SA	AC	10	С		LT	R/2A		
ACCUMULATOR	TANK OME-6-4	DISCHARGE	E CHEC	K VAL	VE					FS-C	R	ROJ - 034	Condition Monitoring Program
	, , , , , , , , , , , , , , , , , , , ,									FS-O	R	ROJ - 034	
1-SI-170-L1	1-5143 (M5)	ACTIVE	1	CHK	SA	AC	10	C		LT	R/2A		
ACCUMULATOR	TANK OME-6-1	OUTLET & E	CCS TO		CTOR CO	OLAN		OP		FS-C	R	ROJ - 035	Condition Monitoring Program
#1 COLD LEG CI	HECK VALVE									FS-O	R	ROJ - 035	
1-SI-170-L2	1-5143 (M8)	ACTIVE	1	CHK	SA	AC	10	C		LT	R/2A		
ACCUMULATOR	TANK OME-6-2	OUTLET & E	CCS TO	O REA	CTOR CO	OLAN		OP		FS-C	R	ROJ - 035	Condition Monitoring Program
#2 COLD LEG C	HECK VALVE									FS-O	R	ROJ - 035	
1-SI-170-L3	1-5143 (M7)	ACTIVE	1	СНК	SA	AC	10	С		LT	R/2A		· · · · · · · · · · · · · · · · · · ·
ACCUMULATOR	TANK OME-6-3	OUTLET & E	CCS T	O REA	CTOR CO	OLAN	IT LO	OP		FS-C	R	ROJ - 035	Condition Monitoring Program
#3 COLD LEG C	HECK VALVE									FS-O	R	ROJ - 035	
1-SI-170-L4	1-5143 (M6)	ACTIVE	1	CHK	SA	AC	10	С		LT	R/2A		
ACCUMULATOR	TANK OME-6-4	OUTLET & E	ECCS T	O REA	CTOR CO	OLAN		OP		FS-C	R	ROJ - 035	Condition Monitoring Program
#4 COLD LEG C	HECK VALVE									FS-O	R	ROJ - 035	
1-SI-171	1-5143A (H9)	PASSIVE	2	GLB	MAN	A	0.75	С		LJ	OPB		
SAFETY INJECT	ION PUMPS TES	T LINE TO C	CVCS H	OLDU	P TANK SI	HUTC	off V	ALVE					
1-SI-172	1-5143A (G9)	PASSIVE	2	GLB	MAN	A	0.75	С		LJ	OPB		
ECCS TEST LIN	E TO CVCS HOLI	DUP TANKS	SHUT	off va	ALVE		•						
1-SI-185	1-5129 (K5)	ACTIVE	2	СНК	SA	AC	8	С		LT	R/2A		
REFUELING WA	TER STORAGE	FANK TK-33	TO CV	сѕ сн	ARGING F	PUMP	s			FS-C	R	ROJ - 015	LT
SUCTION HEAD	ER CHECK VALV	Æ			_		-			FS-O	R	ROJ - 015	
· 1-SI-189	1-5128A (D6)	ACTIVE	2	СНК	SA	AC	4	С		FS-C	R	ROJ - 036	Condition Monitoring Program
ECCS SAFETY	ALVES DISCHAI	RGE HEADE	ER TO F	RESS	URIZER R	ELIE	F TAN	IK		FS-O	R	ROJ - 036	
CONTAINMENT	ISOLATION CHE	CK VALVE								PS-O	R		Partial Stroke only if valve is disassembled
										LJ	OPB		

9



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
	1-5143A (J9)	PASSIVE	2	GLB	MAN	Α	0.75	С		LJ	OPB		
RESIDUAL HEAT VALVE	REMOVAL TES	T LINE TO C	VCS H	OLDUF	P TANKS S	HUT	OFF						
1-SV-100-1	1-5143A (B3)	ACTIVE	2	REL	SA	С	1	С		SVT	10A		<u> </u>
ACCUMULATOR	TANK OME-6-1	SAFETY VA	LVE										
1-SV-100-2	1-5143A (L3)	ACTIVE	2	REL	SA	С	1	С		SVT	10A		······································
ACCUMULATOR	TANK OME-6-2	SAFETY VA	LVE										
1-SV-100-3	1-5143A (H3)	ACTIVE	2	REL	SA	С	1	С		SVT	10A	<u>. </u>	·
ACCUMULATOR	TANK OME-6-3	SAFETY VA	LVE										
1-SV-100-4	1-5143A (E3)	ACTIVE	2	REL	SA	С	1	C		SVT	10A	· · · · · · · · · · · · · · · · · · ·	
ACCUMULATOR	TANK OME-6-4	SAFETY VA	LVE										
1-SV-96	1-5142 (J8)	ACTIVE	2	REL	SA	С	0.75	C		SVT	10A		
SAFETY INJECT	ION PUMPS SUC	TION HEAD	DER SAI	FETY \	/ALVE								
1-SV-97	1-5142 (J4)	ACTIVE	2	REL	SA	С	0.75	C		SVT	10A		
BORON INJECT	ION TANK TK-11	OUTLET SA	FETY V	ALVE									
1-SV-98N	1-5142 (C9)	ACTIVE	2	REL	SA	С	0.75	C	_	SVT	10A		in
NORTH SAFETY	INJECTION PUN	<i>(</i> IP PP-26N (DISCHA	RGE H	IEADER S	AFET	ry vai	LVE					
1-SV-98S	1-5142 (E8)	ACTIVE	2	REL	SA	С	0.75	C		SVT	10A		
SOUTH SAFETY	INJECTION PUN	/P PP-26S [DISCHA	RGE H	EADER S	AFET	'Y VAI	LVE				7	
2-ICM-250	2-5142 (H2)	ACTIVE	1	GAT	MO	A	4	C	Al	LJ	OPB		
BORON INJECT	ION TANK TRAIN	A' OUTLET			NT ISOLA	TION	VALV	/E		DIAG	3R		
										FSE	18M	OMN-1	



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SI - Safety Injection

<u> </u>	· · · · · · · · · · · · · · · · · · ·		Code					Posi	tion			Code		· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.		Comments
2-ICM-251	2-5142 (H3)	ACTIVE	1	GAT	MO	Α	4	С	AI	IJ	OPB			
BORON IN IECT	ION TANK TRAIN		CONT							DIAG	3R			
BORON NOLOI		DOULLI	00117				VALV	-		FSE	18M		OMN-1	
2-ICM-260	2-5142 (C9)	ACTIVE	2	GAT	МО	Α	4	0	AI	LJ	OPB			
NORTH SAFETY		IP PP-26N [DISCHA	RGE C	ONTAINM	ENT				FSE	С	CSJ - 035	OMN-1	
ISOLATION VAL	VE				•••••					DIAG	6R			
2-ICM-265	2-5142 (C8)	ACTIVE	2	GAT	MO	Α	4	0	Al	LJ	OPB			
SOUTH SAFETY		IP PP-26S D	ISCHA	RGE C	ONTAINM	ENT	ISOLA	TION		FSE	C	CSJ - 035	OMN-1	
VALVE		200 2								DIAG	6R			
2-ICM-305	2-5143 (C1)	ACTIVE	2	GAT	MO	A	18	С	Al	LJ	OPB			
RECIRCULATIO	N SUMP TO FAS	T RHR/CTS	PUMPS	SUCT			JENT			DIAG	3R			
ISOLATION VAL	VE						· · · · ·			FSE	18M		OMN-1	
2-ICM-306	2-5143 (C4)	ACTIVE	2	GAT	MO	Α	18	С	AI	LJ	OPB		•	
RECIRCULATIO	N SUMP TO WES	T RHR/CTS		s suc		TAIN	MENT	г		DIAG	3R			
ISOLATION VAL	VE	, , , , , , , , , , , , , , , , , , , ,		0000						FSE	18M		OMN-1	
2-ICM-311	2-5143 (G7)	ACTIVE	2	GAT	MO	В	8	0	AI	DIAG	9A			
FAST RESIDUA			OPS #			FGS				FSE	18M		OMN-1	
CONTAINMENT	ISOLATION VAL	VE												
2-ICM-321	2-5143 (G9)	ACTIVE	2	GAT	MO	В	8	0	Al	DIAG	8A			
WEST RHR TO	REACTOR COOL		; #2 AN	D #3 C	OLDIEGS	S				FSE	18M		OMN-1	
CONTAINMENT	ISOLATION VAL	VE	////										4	
2-IMO-110	2-5143A (B6)	PASSIVE	2	GAT	MO	В	10	0	AI	PIT	2A			
ACCUMULATOR	R TANK OME-6-1	OUTLET VA	LVE											
·····	· .													
2-IMO-120	2-5143A (L6)	PASSIVE	2	GAT	MO	В	10	0	Al	PIT	2A			
ACCUMULATOR	R TANK OME-6-2	OUTLET VA	LVE											
2-IMO-130	2-5143A (H6)	PASSIVE	2	GAT	MO	В	10	0	AI	PIT	2A			· · · · · · · · · · · · · · · · · · ·
ACCUMULATO	R TANK OME-6-3	OUTLET VA	LVE											
	•••													

Revision 4



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

••••••••••••••••••••••••••••••••••••••	<u> </u>		Code		· · ·			Posi	tion			Code	·	· · · · · · · · · · · · · · · · · · ·
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comme	nts
2-IMO-140	2-5143A (E6)	PASSIVE	2	GAT	мо	B	10	0	AI	PIT	2A			
ACCUMULATOR	TANK OME-6-4	OUTLET VAI	.VE											
													·	
2-IMO-255	2-5142 (J7)	ACTIVE	2	GAI	мо	в	4	С	Al	FSE	C	CSJ - 039	OMN-1	
BORON INJECTI	ON TANK TRAIN	'A' INLET SI	HUTOFI	F VAL\	/E					DIAG	3R			
2-IMO-256	2-5142 (J6)	ACTIVE	2	GAT	MO	В	4	С	Al	FSE	C	CSJ - 039	OMN-1	
BORON INJECT	ION TANK TRAIN	'B' INLET S	HUTOF	F VAL\	/Ē					DIAG	3R			
2-IMO-261	2-5142 (H8)	ACTIVE	2	GAT	MO	A	8	0	AI	LT	R	REL - 002	<u> </u>	
	TER STORAGE	ANK TK-33			SAFETY IN					FSE	С	CSJ - 021	OMN-1	
PUMPS SHUTOR	F VALVE		JOI PL	1 100				· .		DIAG	6R			
2-IMO-262	2-5142 (L8)	ACTIVE	2	GLB	MO	A	2	0	Al	LT	R			
SAFETY INJECT	ION PUMPS REC			G WAT	FER STOR		TAN	()		FSE	С	CSJ - 022	OMN-1	
TK-33 TRAIN 'A'	SHUTOFF VALVI	Ξ	022	•••••						DIAG	3R			
2-IMO-263	2-5142 (L8)	ACTIVE	2	GLB	MO	Α	2	0	AI	LT	R			······································
SAFETY IN IECT	ION PLIMPS REC			G WA1	FR STOR			<		FSE	С	CSJ - 022	OMN-1	
TK-33 TRAIN 'B'	SHUTOFF VALVI	E	ULLIN	0				•		DIAG	3R			
2-IMO-270	2-5142 (E9)	ACTIVE	2	GAT	MO	В	4	0	Al	FSE	C		OMN-1	
SAFETY INJECT	ION PUMPS DIS		ROSSTI		IN 'A' SHU	TOFF		VE		FSE	С	CSJ - 035	OMN-1	
							• • • • •			DIAG	3R			
2-IMO-275	2-5142 (E8)	ACTIVE	2	GAT	MO	В	4	0	AI	FSE	С	CSJ - 035	OMN-1	
SAFETY INJECT	TION PUMPS DIS	CHARGE CF	ROSSTI	E TRA	IN 'B' SHU	TOFF	VAL	VE		DIAG	6R	· .		
2-IMO-315	2-5143 (K6)	ACTIVE	1	GAT	MO	В	8	C	Al	FSE	С	CSJ - 023	OMN-1	<u></u>
FAST RHR AND	NORTH SAFETY	INJECTION	TO RE	ACTO	R COOLAI		OPS	#1		DIAG	3R			
AND #4 HOT LE	GS SHUTOFF VA	LVE												
2-IMO-316	2-5143 (K6)	ACTIVE	2	GAT	MO	В	8	0	AI	FSE	С	CSJ - 024	OMN-1	
EAST RHR AND AND #4 COLD L	NORTH SAFETY EGS SHUTOFF V	INJECTION	TO RE	ACTO	R COOLAI		OPS	#1		DIAG	3R			



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

<u></u>			Code					Posi	tion		· · · · ·	Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-IMO-325	2-5143 (K9)	ACTIVE	1	GAT	MO	B	8	С	AI	FSE	С	CSJ - 023	OMN-1
WEST RHR AND AND #3 HOT LE) SOUTH SAFETY GS SHUTOFF VA	'INJECTION	I TO RE	АСТО	R COOLAI	NTLO	DOPS	#2		DIAG	1R		
2-IMO-326	2-5143 (K9)	ACTIVE	2	GAT	MO	В	8	0	AI	FSE	С	CSJ - 024	OMN-1
WEST RHR AND AND #3 COLD L	SOUTH SAFETY EGS SHUTOFF V	INJECTION	I TO RE	АСТО	R COOLA	NT LO	DOPS	; #2		DIAG	3R		
2-IMO-360	2-5129 (H6)	ACTIVE	2	GAT	MO	В	4	0	AI	DIAG	9A		
SAFETY INJECT	TION PUMPS TO (TOFF VALVE	CVCS CHAR	GING F	PUMPS	SUCTION	N HEA	DER			FSE	18M		OMN-1
2-IMO-361	2-5142 (G9)	ACTIVE	2	GAT	MO	В	4	С	AI	DIAG	54M		· · · · · · · · · · · · · · · · · · ·
SAFETY INJECT	TION PUMPS SUC N 'A' SHUTOFF VA	TION TO AN		M CH/	ARGING P	UMP	S			FSE	18M		OMN-1
2-IMO-362	2-5142 (G9)	ACTIVE	2	GAT	MO	В	4	С	AI	DIAG	54M		
SAFETY INJEC SUCTION TRAIL	LION PUMPS SUC N 'B' SHUTOFF VA	TION TO AN	ND FRC	M CH/	ARGING P	UMP	S			FSE	18M		OMN-1
2-IMO-390	2-5143 (F2)	ACTIVE	2	GAT	MO	В	12	0	AI	FSE	С	CSJ - 028	OMN-1
REFUELING W/	ATER STORAGE 1	TANK TK-33 VE	TO RE	SIDUA	L HEAT RI	EMO	/AL			DIAG	3R		
2-IMO-51	2-5142 (E2)	ACTIVE	2	GLB	MO	В	1.5	0	AI	FSE	С	CSJ - 029	Non OMN-1
BORON INJECT	ION TO REACTO	R COOLANT	LOOP	#1 SH	UTOFF VA	ALVE				ST-C	С		
										PIT .	2A		
2-IMO-52	2-5142 (D2)	ACTIVE	2	GLB	MO	В	1.5	0	A	FSE	<u> </u>	CSJ - 029	Non-OMN-1
BORON INJECT	ION TO REACTO	R COOLANT	LOOP	#2 SH	UTOFF V	ALVE				ST-C	С		
<u>ہ</u>	••••••••••••••••••••••••••••••••••••••									PIT	2A		
2-IMO-53	2-5142 (C2)	ACTIVE	2	GLB	MO	В	1.5	0	Al	FSE	С	CSJ - 029	Non-OMN-1
BORON INJECT	ION TO REACTO	R COOLANI	LOOP	#3 SH	UTOFF V	ALVE				ST-C	С		
										PIT	2A		
2-IMO-54	2-5142 (F2)	ACTIVE	2	GLB	MO	в	1.5	0	Al	FSE	C	CSJ - 029	Non-UMN-1
BORON INJECT	ION TO REACTO	R COOLAN	r loop	#4 SH	IUTOFF V/	ALVE				SI-C	C		
									·	PIT	2A		



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SI - Safety Injection

	Code Position												Code			
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.		Test	Freq	Dev.		Comments	
2-IMO-910	2-5129 (L5)	ACTIVE	2	GAT	MO	A	8	С	Al	· L	.T .	R	REL - 002			
REFUELING WA	TER STORAGE 1	ANK TO CV	CS CH	ARGIN	G PUMPS	SUC	TION			DI	AG	3R				
HEADER TRAIN	'A' SHUTOFF VA	LVE								F	SE	18M		OMN-1		
2-IMO-911	2-5129 (L6)	ACTIVE	2	GAT	MO	Α	8	С	AI	L	.T	R	REL - 002			
REFUELING WA	TER STORAGE T	ANK TO CV	CS CH	ARGIN	G PUMPS	SUC	TION			DI	AG	3R				
HEADER TRAIN	'B' SHUTOFF VA	LVE								F	SE	18M		OMN-1		
2-IRV-110	2-5143A (B6)	PASSIVE	2	GLB	AO	В	1	С	С	P	TI	2A				
ACCUMULATOR	TANK OME-6-1	DRAIN VAL	/E	•	1 5 7 -											
2-IRV-111	2-5143A (C5)	PASSIVE	2	GLB	AO	В	1	C	С	- <u> </u>	'IT	2A				
ACCUMULATOR	TANK OME-6-1	FILL LINE C	ONTRO	L VAL	VE											
2-IRV-120	2-5143A (L6)	PASSIVE	2	GLB	AO	В	0.75	<u>; C</u>	С	- <u> </u>	TI	2A		<u></u>	<u></u>	
ACCUMULATOR	TANK OME-6-2		/E													
2-IRV-121	2-5143A (M5)	PASSIVE	2	GLB	AO	В	1	С	С	F	TI	2A				
ACCUMULATOR	TANK OME-6-2	FILL LINE C	ONTRO	L VAL	VE											
2-IRV-130	2-5143A (H6)	PASSIVE	2	GLB	AO	В	1	С	С	F	דוי	2A	-,, n <u></u>		<u></u>	
ACCUMULATOR	TANK OME-6-3 I	DRAIN VAL	/E													
2-IRV-131	2-5143A (J5)	PASSIVE	2	GLB	AO	В	1	С	C	F	TIT	2A				<u></u>
ACCUMULATOR	TANK OME-6-3	FILL LINE C	ONTRO	L VAL	VE					·						
2-IRV-140	2-5143A (E6)	PASSIVE	2	GLB	AO	В	1	С	С	F	TIT	2A				
ACCUMULATOR	TANK OME-6-4 I	ORAIN VAL	/E													
2-IRV-141	2-5143A (F5)	PASSIVE	2	GLB	AO	В	1	С	C	F	TI	2A				
ACCUMULATOR	TANK OME-6-4	FILL LINE C	ONTRO	L VAL	VE											

Revision 4



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code					Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-IRV-149	2-5143A (M9)	PASSIVE	. 2	GLB	AO	В	0.75	5 C	С	PIT	2A		
WEST RESIDUA TEST VALVE	AL HEAT REMOVA	L TO REAC	TOR C	OOLAN	IT LOOPS	; #2 A	ND #	3					
2-IRV-150	2-5143A (M9)	PASSIVE	2	GLB	AO	B	0.75	5 C	С	PIT	2A		
EAST RESIDUA TEST VALVE	L HEAT REMOVA	L TO REAC	FOR CO	OLAN	T LOOPS	#1 Al	ND #4	ļ					
2-IRV-157	2-5143A (M8)	PASSIVE	2	GLB	AO	В	0.75	5 C	С	PIT	2A		M / W. (
WEST RHR ANI TEST VALVE	D SAFETY INJECT	ION TO RE	ACTOR	COOL	ANT LOO	PS #2	2 ANE)#3					
2-IRV-158	2-5143A (M9)	PASSIVE	2	GLB	AO	В	0.75	5 C	С	PIT	2A		
EAST RHR AND AND #4 TEST V	NORTH SAFETY ALVE	INJECTION	TO RE	ACTO	R COOLAI	NT PL	JMPS	; #1					
2-IRV-260	2-5142 (D8)	PASSIVE	2	GLB	AO	В	0.75	5 C	С	PIT	2A		
SAFETY INJEC	TION TEST LINE S	SHUTOFF V	ALVE										
2-IRV-50	2-5142 (D3)	PASSIVE	2	GLB	AO	В	1	· · C	C	PIT	2A		
BORON INJECT	TION TO ACCUMU	LATOR FILI	LINE	CONTR	ROL VALV	E							
2-IRV-60	2-5142 (B8)	PASSIVE	2	GLB	AO	В	1	C	С	PIT	2A	<u>,</u>	· ·
SAFETY INJEC	TION TO ACCUMU	JLATOR FIL	LLINE	CONT	ROL VALV	Έ							
2-SI-101	2-5142 (H8)	ACTIVE	2	CHK	SA	AC	8	С	<u></u>	FS-C	R	ROJ-019 LT	
REFUELING W/	ATER STORAGE 1	TANK TK-33	SUPPL	Y TO S	SAFETY IN	IJEC.	TION			FS-O	R	ROJ - 019	
PUMPS SUCTIO	ON CHECK VALVE								_ <u></u> .		R		
2-SI-103N	2-5142 (F9)	ACTIVE	2	GAT	MAN	В	6	. 0		FSE	2A		
NORTH SAFET	Y INJECTION PUN	1P PP-26N \$	SUCTIO	N SHU	TOFF VAI	LVE							
2-SI-103S	2-5142 (K9)	ACTIVE	2	GAT	MAN	В	6	0		FSE	2A	···· · · · · · · · · · · · · · · · · ·	
SOUTH SAFET	Y INJECTION PUN	IP PP-26S S	SUCTIO	N SHU	Toff val	VE							
Revision 4		·	· · · · · ·		······					· · ·			AE



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

			Code			Position			Code					
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.		Comments	•
2-SI-104N	2-5142 (E9)	ACTIVE	2	СНК	SA	С	0.75	С	BDT-C	R				
NORTH SAFETY CHECK VALVE	INJECTION MINI	FLOW TO	REFUE	LING	VATER ST	ORA	GE TA	NK	FS-O	Q		·		
2-SI-104S	2-5142 (H9)	ACTIVE	2	CHK	SA	С	0.75	C	BDT-C	R				
SOUTH SAFETY TK-33 CHECK V	INJECTION MINI	FLOW TO	REFUE	LING V	VATER ST	ORA	GE TA	NK	FS-O	Q				
2-SI-106N	2-5142 (E9)	ACTIVE	2	GLB	MAN	В	0.75	0	FSE	2A			- <u></u>	
NORTH SAFETY TANK SHUTOFF	INJECTION PUM	P MINI-FLO	W TO F	REFUE	LING WAT	rer s	STOR/	AGE						
2-SI-106S	2-5142 (J9)	ACTIVE	2	GLB	MAN	В	0.75	0	FSE	2A				
SOUTH SAFETY TANK TK-33 SH	INJECTION PUM	P MINI-FLO	W TO F	REFUE	LING WAT	rer s	STOR	AGE						
2-SI-110N	2-5142 (E9)	ACTIVE	2	CHK	SA	С	4	С	FS-C	R				
NORTH SAFETY	INJECTION PUN	IP PP-26N [DISCHA	RGE H	EADER C	HEC	(VAL	VE	FS-O	R	ROJ - 011			
2-SI-110S	2-5142 (H9)	ACTIVE	2	CHK	SA	С	4	С	FS-C	R				•
SOUTH SAFETY	INJECTION PUM	P PP-26S C	DISCHA	RGE H	EADER C	HECK	(VAL	VE	FS-O	R	ROJ - 011			
2-SI-142-L1	2-5142 (C1)	ACTIVE	1	CHK	SA	С	1.5	С	FS-C	R	ROJ - 012	LT		
BORON INJECT	ION TO REACTO		r loop	#1 CO	LD LEG C	HECI	K VAL	VE	FS-O	R	ROJ - 012			
2-SI-142-L2	2-5142 (C1)	ACTIVE	1	CHK	SA	С	1.5	С	FS-C	R	ROJ - 012	LT		<u></u>
BORON INJECT	ION TO REACTO	R COOLAN	LOOP	#2 CO	LD LEG C	HECI	K VAL	VE	FS-O	R	ROJ - 012			
2-SI-142-L3	2-5142 (C2)	ACTIVE	1	CHK	SA	С	1.5	С	FS-C	R	ROJ - 012	LT	<u></u>	
BORON INJECT	ION TO REACTO		LOOP	#3 CO	LD LEG C	HEC	K VAL	VE	FS-O	R	ROJ - 012			
2-SI-142-L4	2-5142 (C1)	ACTIVE	1	CHK	SA	С	1.5	C	FS-C	R	ROJ - 012	LT		
BORON INJECT	ION TO REACTO		r loop	#4 CO	LD LEG C	HEC	K VAL	VE	FS-O	R	ROJ - 012			



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SI - Safety Injection

			Code					Position			Code	
Component	PID(Coord)	Function	Class	Type	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
2-SI-148	2-5143 (F2)	ACTIVE	2	СНК	SA	С	12	С	BDT-C	R		
REFUELING WA	TER STORAGE	FANK TK-33	TO RE	SIDUAI	HEAT RE	EMOV	/AL		FS-O	R	ROJ - 013	
2-SI-151E	2-5143 (H6)	ACTIVE	2	CHK	SA	AC	8	С	LT	R/2A		
FAST RESIDUA		I TO REAC			TIOOPS	#1 AN			FS-C	R	ROJ - 022	LT
CHECK VALVE				• — ••	. 2001 0				FS-O	R	ROJ - 022	
2-SI-151W	2-5143 (H9)	ACTIVE	2	CHK	SA	AC	8	С	LT	R/2A		#*************************************
WEST RHR TO	REACTOR COOL	ANT LOOPS	#2 & #	3 CHE					FS-C	R	ROJ - 022	LT
									FS-O	R	ROJ - 022	14. 14
2-SI-152N	2-5143 (H7)	ACTIVE	2	CHK	SA	AC	4	C	LT	R/2A		
NORTH SAFETY	INJECTION TO	REACTOR C			PS#1 AN	D #4	CHE	ск	FS-C	R	ROJ - 011	Condition Monitoring Program
VALVE									FS-O	R	ROJ - 011	NIE
2-SI-152S	2-5143 (H9)	ACTIVE	2	CHK	SA	AC	4	С	LT	R/2A		
SOUTH SAFETY	INJECTION TO	REACTOR C	OOLAN		PS#2 AN	D #3	CHE	СК	FS-C	R	ROJ - 011	Condition Monitoring Program
VALVE									FS-O	R	ROJ - 011	NIE
2-SI-158-L1	2-5143 (M7)	ACTIVE	1	CHK	SA	AC	6	С	LT	R/2A		· · · · · · · · · · · · · · · · · · ·
EAST RHR AND	NORTH SAFETY	'INJECTION		ACTO			OP #	ŧ1	FS-C	R	ROJ - 014	LT
HOT LEG CHEC	K VALVE								FS-O	R	ROJ - 014	
2-SI-158-L2	2-5143 (M9)	ACTIVE	1	СНК	SA	AC	6	С	LT	R/2A	· · · · · · · · · · · · · · · · · · ·	
WEST RHR AND	D SOUTH SAFET	Y INJECTION		EACTO	R COOLA	NT LO	DOP ;	#2	FS-C	R	ROJ - 014	LT
HOT LEG CHEC	K VALVE								FS-O	R	ROJ - 014	
2-SI-158-L3	2-5143 (M9)	ACTIVE	1	CHK	SA	AC	6	С	LT	R/2A		
WEST RHR ANI	D SOUTH SAFET	Y INJECTIO		EACTO	R COOLA	NT LO	OOP	#3	FS-C	R	ROJ - 014	LT
HOT LEG CHEC	K VAŁVE								FS-O	R	ROJ - 014	
' 2-SI-158-L4	2-5143 (M6)	ACTIVE	1	СНК	SA	AC	6	C	LT	R/2A		
EAST RHR AND	NORTH SAFETY	'INJECTION	I TO RE	ACTO			OOP #	4	FS-C	R	ROJ - 014	LT
HOT LEG CHEC	K VALVE								FS-O	R	ROJ - 014	

17



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

Code Positi								tion			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-SI-161-L1	2-5143 (L6)	ACTIVE	1	СНК	SA	AC	6	С		LT	R/2A		
FAST RHR AND	NORTH SAFETY	INJECTION	TO RE	ACTOF			OP #	1		FS-C	R	ROJ - 014	LT
COLD LEG CHE	CK VALVE					0		•		FS-O	R	ROJ - 014	•
2-SI-161-L2	2-5143 (L8)	ACTIVE	1	CHK	SA	AC	6	C		LT	R/2A		
WEST RHR & S	OUTH SAFETY IN	JECTION TO	O REAC	TOR	OOLANT	LOOP	> #2 (FS-C	R	ROJ - 014	LT
LEG CHECK VA	LVE									FS-O	R	ROJ - 014	
2-SI-161-L.3	2-5143 (L9)	ACTIVE	1	CHK	SA	AC	6	С		LT	R/2A		
WEST RHR & S	OUTH SAFETY IN	JECTION TO	O REAC	TOR C	OOLANT	LOOI	P #3 (COLD		FS-C	R	ROJ - 014	LT
LEG CHECK VA	LVE		•••=••							FS-O	R	ROJ - 014	
2-SI-161-L4	2-5143 (L6)	ACTIVE	1	CHK	SA	AC	6			LT	R/2A		· · · · · · · · · · · · · · · · · · ·
EAST RHR AND	NORTH SAFETY	INJECTION	TO RE	ACTOF			OP #	4		FS-C	R	ROJ - 014	LT
COLD LEG CHE	CK VALVE					0		•		FS-O	R	ROJ - 014	
2-SI-166-1	2-5143A (B7)	ACTIVE	1	CHK	SA	AC	10	С		LT	R/2A		
ACCUMULATOR	R TANK OME-6-1	DISCHARGE	E CHEC		νE					FS-C	R	ROJ - 034	Condition Monitoring Program
										FS-O	R	ROJ - 034	
2-SI-166-2	2-5143A (L7)	ACTIVE	1	CHK	SA	AC	10	С		LT	R/2A		
ACCUMULATOR	R TANK OME-6-2 I	DISCHARGE	E CHEC		νE					FS-C	R	ROJ - 034	Condition Monitoring Program
										FS-O	R	ROJ - 034	
2-SI-166-3	2-5143A (H7)	ACTIVE	1	CHK	SA	AC	10	С		LT	R/2A		
ACCUMULATOR	R TANK OME-6-3	DISCHARGE		K VAL	VE ·					FS-C	R	ROJ - 034	Condition Monitoring Program
										FS-O	R	ROJ - 034	
2-SI-166-4	2-5143A (E7)	ACTIVE	1	CHK	SA	AC	10	С		LT	R/2A		
ACCUMULATOR	R TANK OME-6-4	DISCHARGE	E CHEC		VE ·					FS-C	R	ROJ - 034	Condition Monitoring Program
1.0000.0000.000 1.	·									FS-O	R	ROJ - 034	
' 2-SI-170-L1	2-5143 (M5)	ACTIVE	1	CHK	SA	AC	10	C		LT	R/2A		
ACCUMULATOR	R TANK OME-6-1	OUTLET & E	ECCS T		CTOR CO			OP		FS-C	R	ROJ - 035	Condition Monitoring Program
#1 COLD LEG C	HECK VALVE									FS-O	R	ROJ - 035	



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

1

			Code			Code						
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
2-SI-170-L2	2-5143 (M8)	ACTIVE	1	СНК	SA	AC	10	С	LT	R/2A		
ACCUMULATO	R TANK OME-6-2	OUTLET & E	CCS TO		CTOR CO			OP	FS-C	R	ROJ - 035	Condition Monitoring Program
#2 COLD LEG C	CHECK VALVE							•••	FS-O	R	ROJ - 035	
2-SI-170-L3	2-5143 (M7)	ACTIVE	- 1	CHK	SA	AC	10	С	LT	R/2A		
ACCUMULATO	R TANK OME-6-3	OUTLET & E	CCS TO		CTOR CO	OLAN		OP .	FS-C	R	ROJ - 035	Condition Monitoring Program
#3 COLD LEG C	CHECK VALVE								FS-O	R	ROJ - 035	· .
2-SI-170-L4	2-5143 (M5)	ACTIVE	1	CHK	SA	AC	10	С	LT	R/2A		
ACCUMULATO	R TANK OME-6-4	OUTLET & E	ECCS TO		CTOR CO	OLAN	IT LO	OP	FS-C	R	ROJ - 035	Condition Monitoring Program
#4 COLD LEG C	CHECK VALVE								FS-O	R	ROJ - 035	
2-SI-171	2-5143A (H9)	PASSIVE	2	GLB	MAN	Α	0.75	C	LJ	OPB		
SAFETY INJEC	TION PUMPS TES	T LINE TO (CVCS H	OLDUI	P TANK SI	HUTC	OFF V	ALVE				
2-SI-172	2-5143A (G9)	PASSIVE	2	GLB	MAN	Α	0.75	С	LJ ·	OPB		
ECCS TEST LIN	NE TO CVCS HOLI	OUP TANKS	SHUT	off va	LVE							
2-SI-185	2-5129 (K5)	ACTIVE	2	CHK	SA	AC	8	С	LT	R/2A		
REFUELING W	ATER STORAGE 1	TANK TK-33	TO CV	CS CH	ARGING F	UMP	s		FS-C	R	ROJ - 015	LT
SUCTION HEAD	DER CHECK VALV	/E					•		FS-O	R	ROJ - 015	
2-SI-189	2-5128A (D7)	ACTIVE	2	CHK	SA	AC	4	С	FS-C	R	ROJ - 036	Condition Monitoring Program
ECCS SAFETY	VALVES DISCHAI	RGE HEADE		RESS	URIZER R	ELIEI	F TAN	IK	FS-O	R	ROJ - 036	
CONTAINMENT	FISOLATION CHE	CK VALVE							FS-O	R		
		•							PS-O	R		Partial Stroke only if valve is disassembled
									LJ	OPB		
2-SI-194	2-5143A (J9)	Passive	2	GLB	MAN	A	0.75	C	LJ	OPB	· · ·	
RESIDUAL HEA	AT REMOVAL TES	T LINE TO C	CVCS H	olduf	P TANKS S	SHUT	OFF					
2-SV-100-1	2-5143A (B3)	ACTIVE	2	REL	SA ·	С	1	С	SVT	10A		· · · · · · · · · · · · · · · · · · ·
ACCUMULATO	R TANK OME-6-1	SAFETY VA	LVE									



Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SI - Safety Injection

			Code				. •	Posi	tion			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments
2-SV-100-2	2-5143A (L3)	ACTIVE	2	REL	SA	С	1	С		SVT	10A		
ACCUMULATO	R TANK OME-6-2	SAFETY VAI	LVE										
2-SV-100-3	2-5143A (H3)	ACTIVE	2	REL	SA	С	1	С		SVT	10A		<u></u>
ACCUMULATO	R TANK OME-6-3	SAFETY VAI	LVE				· ·						
2-SV-100-4	2-5143A (E3)	ACTIVE	2	REL	SA	С	1	С	<u> </u>	SVT	10A		
ACCUMULATO	R TANK OME-6-4	SAFETY VA	LVE										
2-SV-96	2-5142 (J8)	ACTIVE	2	REL	SA	С	0.75	i C		SVT	10A		
SAFETY INJEC	TION PUMPS SUC	TION HEAD	DER SAI	ETY \	/ALVE								
2-SV-97	2-5142 (J4)	ACTIVE	2	REL	SA	C	0.75	i C		SVT	10A		
BORON INJECT	FION TANK TK-11	OUTLET SA	FETY V	ALVE									
2-SV-98N	2-5142 (D9)	ACTIVE	2	REL	SA	С	0.75	5 C		SVT	10A		
NORTH SAFET	Y INJECTION PUN	AP PP-26N [DISCHA	RGE H	IEADER S	AFET	Y VA	LVE					
2-SV-98S	2-5142 (D8)	ACTIVE	2	REL	SA	С	0.75	5 C		SVT	10A	· · · ·	
SOUTH SAFET	Y INJECTION PUN	/IP PP-26S [DISCHA	RGE H	IEADER S	AFET	YVA	LVE					
		_											

51

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SPENT - Spent Fuel Pool Cooling and Cleanup

			Code					Position			Code	······································
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm. Fail.	Test	Freq	Dev.	Comments
12-SF-118N	12-5136 (J5)	ACTIVE	3	СНК	SA	C	8	. O/C	FS-C	Q		
NORTH SPENT	FUEL PIT PUMP F	PP-31N DIS	CHARG	E CHE		Ξ			FS-O	Q		
12-SF-118S	12-5136 (J5)	ACTIVE	3	СНК	SA	C	8	0/C	FS-C	Q		
SOUTH SPENT I	FUEL PIT PUMP F	PP-31S DISC	CHARG	E CHE	CK VALVE				FS-O	Q		
12-SF-121N	12-5136 (K4)	ACTIVE	3	DIA	MAN	В	3	0/C	FSE	2A		· · · · · · · · · · · · · · · · · · ·
NORTH SPENT	FUEL PIT PUMP (T FILTER SHUTO	DISCHARGE FF VALVE	E TO C\	CS HC	DLDUP TA	NKS	AND					
12-SF-121S	12-5136 (K4)	ACTIVE	3	DIA	MAN	В	3	O/C	FSE	2A		
SOUTH SPENT	FUEL PIT PUMP [T FILTER SHUTO	DISCHARGE	E TO CV	CS HC	OLDUP TA	NKS .	AND					
12-SF-129	12-5136 (L3)	ACTIVE	. 3	DIA	MAN	В	3	O/C	FSE	2A		
SPENT FUEL PI	T FILTER QC-3 O	UTLET TO S	SPENT	FUEL F	PIT SHUTC	DFF \	/ALVE			1		
1-SF-143	12-5136 (C7)	ACTIVE	3	DIA	MAN	В	2.5	0	FSE	2A		
REFUELING WA	TER PURIFICATI	ON FILTER	OUTLE	Τ ΤΟ Ι	JNIT 1 REI	FUEL	ING					
1-SF-151	12-5136 (K8)	PASSIVE	2	GLB	MAN	Α	2.5	С	LJ	OPB		
REFUELING WA	TER PURIFICATI	ON FILTER	OUTLE	ττοι	JNIT 1 REI	FUEL	ING					
1-SF-153	12-5136 (K8)	PASSIVE	2	GLB	MAN	Α	2.5	С	LJ	OPB		
REFUELING WA	TER PURIFICATI	ON FILTER	OUTLE	ΤΟΙ	JNIT 1 REI	FUEL	ING					
1-SF-159	12-5137A (E5)	PASSIVE	2	DIA	MAN	Α	3	C	LJ	OPB		· · · · · · · · · · · · · · · · · · ·
REFUELING CA	VITY DRAIN TO R	REFUELING /E	WATE	r puri	FICATION	PUN	I P					
1-SF-160	12-5137A (F5)	PASSIVE	2	DIA	MAN	Α	3	С	LJ	OPB		
REFUELING CA	VITY DRAIN TO F	Refueling /e	WATE	R PURI	FICATION	PUN	IP					

Revision 4

1



Units 1 & 2

Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: SPENT - Spent Fuel Pool Cooling and Cleanup

	<u> </u>		Code					Positi	on			Code		
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat.	Size	Norm.	Fail.	Test	Freq	Dev.	Comments	
1-SI-183	12-5136 (F8)	ACTIVE	3	DIA	MAN	В	3	0		FSE	2A			
REFUELING WAT	ER STORAGE T	ANK TO RE	FUELIN	ig wa	TER PURI	FICA	TION							
2-SF-142	12-5136 (D7)	ACTIVE	3	DIA	MAN	В	2.5	0		FSE	2A		 	
REFUELING WAT	ER PURIFICATIO	ON FILTER	OUTLE	ΓΤΟ	INIT 2 REI	FUEL	ING							
2-SF-152	12-5136 (K9)	PASSIVE	2	GLB	MAN	Α	2.5	С		LJ	OPB		 	
REFUELING WAT CAVITY SHUTOFF	ER PURIFICATIO	ON FILTER	OUTLE	TTOL	INIT 2 REI	FUEL	ING				-			
2-SF-154	12-5136 (K9)	PASSIVE	2	GLB	MAN	Α	2.5	C		LJ	OPB	· · · · · · · · · · · · · · · · · · ·		
REFUELING WAT	ER PURIFICATIO	ON FILTER	OUTLE	τ το ι	INIT 2 REI	FUEL	ING							
2-SF-159	12-5137A (E5)	PASSIVE	2	DIA	MAN	Α	3	С		LJ	OPB			
REFUELING CAVI	ITY DRAIN TO R SOLATION VALV	efueling 'e	WATER	PURI	FICATION	PUM	P							
2-SF-160	12-5137A (F5)	PASSIVE	2	DIA	MAN	Α	3	С		LJ	OPB			
REFUELING CAV	ITY DRAIN TO R SOLATION VALV	efueling 'e	WATEF	PURI	FICATION	PUM	P							
2-SI-184	12-5136 (F9)	ACTIVE	3	DIA	MAN	В	3	0		FSE	2A			
REFUELING WAT	ER STORAGE T	ANK TO RE	FUELIN	IG WA	TER PUR	IFICA	TION							

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Fourth Ten Year Interval Program Information Inservice Test Plan Valve Table

SYSTEM: WLDPZ - Weld Channel Pressurization

1 21			Code					Position			Code	
Component	PID(Coord)	Function	Class	Туре	Actuator	Cat	Size	Norm. Fail.	Test	Freq	Dev.	Comments
1-SV-111-1	1-5145 (D2)	ACTIVE	0	REL	SA	C	1.	С	SVT	10A		
NORTH WELD CHANNELS SA	CHANNEL PRESS	SURIZATION) ZONE	ES #1 AND	#3 V	VELD			, ,		
2-SV-111-1	2-5145 (D2)	ACTIVE	0	REL	SA	С	1	С	SVT	10A		· · · · · · · · · · · · · · · · · · ·
NORTH WELD CHANNELS SA	CHANNEL PRESS	SURIZATION		ZONE	ES #1 AND	#3 V	VELD					

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