

EDWIN I. HATCH NUCLEAR PLANT

UNITS 1 AND 2

RESPONSE TO

THE PROVISIONS OF

10 CFR 50.55a(g)

"INSERVICE INSPECTION PROGRAM"

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1.0 INTRODUCTION

1.1 General

This document describes the revised Inservice Inspection (ISI) Program for Edwin I. Hatch Nuclear Plant, Units 1 and 2. The previous ISI programs for Hatch 1 and 2 were prepared in accordance with the 1974 Edition of Section XI with Addenda through Summer 1975.

This revised ISI program has been upgraded with the intent to meet, as much as practical, the requirements of the 1980 Edition of Section XI with Addenda through Winter 1980.

1.2 Effective Date

The revised ISI program shall go into effect on January 1, 1984.

1.3 Scope

This document is a description of the ISI program for Units 1 and 2 of Plant Hatch. The programs for Class 1, 2, and 3 component examinations and for pump and valve surveillance testing are included.

1.4 Component Upgrading

All plant components have been reviewed to determine the appropriate classification for inservice inspection. Regulatory Guide 1.26 was used for guidance in determining component classifications.

It must be noted that the classification of components as ASME Class 1, 2, or 3 equivalent for inservice inspection does not imply that the components were designed in accordance with ASME requirements. The component design codes remain as stated in the FSAR.

1.5 Subsequent ISI Program Revisions

It is anticipated that this ISI program will be reviewed again near the end of 80 months of implementation of this program. At that time, the program will be modified as required to bring it into compliance with a later Nuclear Regulatory Commission (NRC) approved edition of ASME Section XI. The inservice program for pumps and valves will be similarly reviewed and modified at that time. The 80-month date is being used so that the start date of the following 120-month interval of the ISI program for the two units will coincide. At that time, Hatch 2 will have completed its first 120-month interval while Hatch 1 will have completed 160 months of operation.

1.6 Responsibility

Georgia Power Company bears the overall responsibility for the performance of the inservice inspection activities. Certain nondestructive examinations will be performed by qualified examination agencies. The results of such examinations will be reported to Georgia Power Company for final disposition.

1.7 Records

Records and documentation of information and examination results, which provide the basis for evaluation and which facilitate comparison with results from previous and subsequent examinations, will be maintained and available for the active life of the plant in accordance with Section XI, IWA-6000 with the exception of the due date for the Owner's Report for Inservice Inspection, Form NIS-1 (see Paragraph 1.7.1 for Relief Request).

1.7.1 Due Date for Owner's Report for Inservice Inspection, Form NIS-1

1.7.1.1 Requirement From Which Relief is Requested

Paragraph IWA-6230 of Section XI requires that the Owner's Report for Inservice Inspection, Form NIS-1 shall be filed with the enforcement and regulatory authorities (in this case, the Nuclear Regulatory Commission) within 90 days of the completion of the inservice inspection. Relief from this due date is requested.

1.7.1.2 Justification

The 90-day due date is unrealistic to prepare the NIS-1 Form and to have the multiple reviews required. The preparation of the NIS-1 Form itself requires almost 90 days with at least another 30 days needed for the review by site personnel and the Inspector.

1.7.1.3 Reporting in Lieu of Section XI Requirements

The NIS-1 Form will be submitted to the NRC within 120 days of the completion of the inservice inspection.

1.8 Methods of Examination

The method of examination planned for each area is delineated in subsequent sections. Personnel performing NDT examinations will be trained in accordance with the American Society for Nondestructive Testing (ASNT) "Recommended Practice SNT-TC-1A, Supplements and Appendices", as applicable for technique and method used.

1.8.1 Ultrasonic Examination (UT)

It is anticipated that most volumetric examinations will be performed ultrasonically. Examinations will be conducted in accordance with the requirements of IWA-2232 of ASME Section XI except as requested by relief.

1.8.2 Radiographic Examination (RT)

Radiographic techniques will be used to supplement UT as required.

1.8.3 Liquid Penetrant Examination (PT)

Dye penetrant examinations will be performed whenever a surface examination is required on non-magnetic piping.

1.8.4 Magnetic Particle Examination (MT)

Magnetic particle tests will be used when surface examination of carbon steel components is required.

1.8.5 Visual Examination (VT)

Visual examinations are divided into four types:

a. VT-1

This examination shall be conducted to determine the condition of the part, component, or surface examined.

b. VT-2

This examination shall be conducted to locate evidence of leakage from pressure retaining components.

c. VT-3

This examination shall be conducted to determine the general mechanical and structural condition of components and their supports.

d. VT-4

This examination shall be conducted to determine conditions relating to the operability of components or devices.

1.9 Standards for Examination Evaluation

The acceptance standards for Class 1 components will be either IWB-3000 or the Section III construction Code for the plant, as applicable.

For Class 2 and 3 components, Articles IWC-3000 and IWD-3000, respectively, are in the course of preparation. Both Articles state that the rules of Article IWB-3000 may be used. Therefore, the acceptance standards for Class 2 and 3 components will be either Article IWB-3000 or the Section III construction Code for the plant.

For Class 1, 2, and 3 component supports, the acceptance standards of Article IWF-3000 are in the course of preparation. The Winter 1981 Addenda to the 1980 Edition lists acceptance standards and since the NRC has approved this Addenda, guidance will be taken from Subarticle IWF-3400 of the Winter 1981 Addenda.

1.10 Repair Procedures

Repairs to the pressure retaining boundary of ASME Class 1, 2, or 3 (equivalent) components will be performed in accordance with Article IWA-4000 by utilizing Georgia Power Company approved procedures which generally comply with the Code applicable to the construction of the component. In addition, replacement of components will be performed per Article IWA-7000 of Section XI to the extent practical.

1.11 Authorized Inspection Agency

IWA-1400 requires that the owner be in possession of an arrangement with an Authorized Inspection Agency to provide inspection services and IWA-2120 specifies the duties of the Inspector. Also, IWA-4140 requires that the services of an Authorized Inspection Agency be employed when making a welded repair.

Although Georgia is a Code state, Section XI is not in the jurisdiction of a state enforcement authority; therefore, an Inspector is not required. Also, Georgia Power Company (GPC) Quality Control and Quality Assurance provides essentially the same function by auditing all inspections, repairs, procedures, etc. In addition NRC inspectors regularly audit these same items.

Georgia Power Company will use an Authorized Inspection Agency to provide an Inspector on an as needed basis, whenever GPC feels their use is warranted.

2.0 INSERVICE INSPECTION FOR CLASS 1 COMPONENTS

Table 1 provides a tabulation of the Class 1 pressure-retaining components subject to the inspection requirements of Subsection IWB of Section XI of the ASME Boiler and Pressure Vessel Code, 1980 Edition with Addenda through Winter 1980. These components will be inspected in accordance with the requirements of Subsection IWB to the extent practical. This tabulation identifies the components to be inspected, the Section XI examination item and category, area to be examined, and the method of examination. Where relief from the inspection requirements of Subsection IWB is requested, information is provided which identifies the applicable Code requirements, justification for the relief requested, and the examination method to be used as an alternative. Table IWB-2500-1 items not applicable to the Hatch Plant have also been listed and identified in the interest of completeness.

Hydrostatic testing will be conducted in a manner that will satisfy the requirements of IWA-5000 and IWB-5000. Where adjoining pipe sections have different test pressures, they will be separated whenever practicable and each section tested at its specified pressure. Where it is not practicable to separate adjoining sections of piping (e.g., boundary is check valve), the sections will be tested together at the lower of the specified test pressures. No point in the piping shall be permitted to experience a pressure greater than the specified test pressure.

Components that are exempted from volumetric and surface examination by IWB-1220 will be hydrostatically tested per the requirements of IWA-5000 and IWB-5000.

2.1 Requests for Relief From ASME Section XI Requirements

2.1.1 Volumetric Examination of Reactor Pressure Vessel and Closure Head Welds

2.1.1.1 Requirement From Which Relief is Requested

Item Nos. B1.11, B1.12, B1.21, and B1.22 of Table IWB-2500-1 require the volumetric examination of Reactor Pressure Vessel (RPV) and Closure Head circumferential, longitudinal, and meridional welds. At Hatch, these examinations will be performed using ultrasonic techniques. The applicable examination volumes are shown in Figures IWB-2500-1, -2, and -3. The 1980 Edition with Addenda through Winter 1980 also requires that welds selected for examination are to be examined for essentially 100% of their length. Relief from this requirement is requested.

2.1.1.2 Justification

At Hatch, physical limitations prevent the examination of the entire length of these welds. The 1974 Edition with Addenda through Summer 1975 and earlier editions of Section XI required that the examination cover at least 10% of the length of each longitudinal weld and 5% of the length of each circumferential weld. For both Hatch units the minimum lengths described above were met during previous examinations.

For RPV circumferential and longitudinal welds, physical limitations allow approximately 5 to 15% of the total length of the welds to be examined at Hatch 1. For Hatch 2 approximately 15% of the total length of the circumferential welds can be examined. The percentages for the twelve longitudinal welds are as follows: six will receive a 100% examination while the remaining six will receive between 30 and 67% examination.

Limitations also exist for the ultrasonic examination of RPV bottom head circumferential and meridional welds. One circumferential weld has been examined (5% of the total length) during an ISI at Hatch 1. Preservice data for Hatch 2 provides the details as to what percentage of these welds can be examined since the designs of the two RPV bottom heads are similar. For the weld described above, 25% of the lower shell to bottom head torus weld length was examined at Hatch 2. For the bottom head torus to bottom head dome weld, 73% of the weld length was examined. The dollar plate weld could not be examined due to inaccessibility caused by the Control Rod Housings. For the bottom head torus meridional welds, approximately 18% of the weld lengths were examined. For the bottom head dome meridional welds, approximately 25% of the weld lengths were examined.

No known limitations exist for the ultrasonic examination of RPV Closure Head circumferential and meridional welds.

2.1.1.3 Testing in Lieu of Section XI Requirements

For future examinations of RPV circumferential, longitudinal, and meridional welds, the examinations will be performed to the extent possible as described in the previous paragraphs.

2.1.2 Straight Beam Examination of Reactor Pressure Vessel and Closure Head Welds Including Nozzle to Vessel Welds

2.1.2.1 Requirement From Which Relief is Requested

Subparagraph T-441.4.3 of Article 4 of Section V requires that prior to the angle beam examination, the base material through which the angle beams will travel shall be scanned with a straight beam transducer to detect laminar reflectors which might effect the angle beam results.

2.1.2.2 Justification

During the preservice examination at both Hatch 1 and 2, the adjacent base material for the RPV and Closure Head welds, including the Nozzle to Vessel welds, were examined with a straight beam transducer and laminar reflectors which would interfere with the angle beam scans were recorded. Since the size of these reflectors will not change, it is unnecessary to perform the straight beam scans again. Also, these scans would only result in additional radiation exposure without a corresponding benefit in reliability.

2.1.2.3 Testing in lieu of Section XI Requirements

Other examinations designed to detect service-induced flaws are required by Section XI on these welds.

2.1.3 Volumetric Examination of Reactor Pressure Vessel and Closure Head Nozzle to Vessel Welds and Nozzle Inside Radius Sections

2.1.3.1 Requirement From Which Relief is Requested

Item Nos. B3.90 and B3.100 of Table IWB-2500-1 require the volumetric examination of RPV and Closure Head Nozzle to Vessel welds and Nozzle Inside Radius Sections. The applicable examination volumes are shown in Figures IWB-2500-7(a) through (d). At Hatch, these examinations will be performed using ultrasonic techniques.

2.1.3.2 Justification

At Hatch, physical limitations prevent the ultrasonic sound beam from passing through the entire examination volume as shown by Figure IWB-2500-7(a) through (d). At a minimum, eight-five percent (85%) of the examination volume has ultrasonic sound beams passing through it. Showing the Nozzle to Vessel weld as N to V and the Nozzle Inside Radius Section as IRS, the following nozzles can not receive a full-Code examination:

Hatch Unit 1

<u>Nozzle Identification</u>	<u>Limited Examinations</u>
N2A	N to V
N2B	N to V
N2C	N to V
N2D	N to V
N2E	N to V
N2F	N to V
N2G	N to V
N2H	N to V
N2J	N to V
N2K	N to V
N4B	N to V; IRS
N4D	N to V; IRS

Hatch Unit 2

<u>Nozzle Identification</u>	<u>Limited Examinations</u>
2N4A	N to V; IRS
2N4C	N to V; IRS

The nozzles listed above are the only ones with known limitations. Any other welds where limitations are encountered will have such limitations reviewed and documented.

2.1.3.3 Testing in Lieu of Section XI Requirements

Not applicable to this relief request.

2.1.4 Volumetric Examination of Austenitic and Dissimilar Metal Piping Welds

2.1.4.1 Requirement From Which Relief is Requested

Item Nos. B5.10, B5.50, B9.11, and B9.12 of Table IWB-2500-1 require a volumetric and surface examination of austenitic and dissimilar metal piping welds. In addition, Item No. B14.10 of Table IWB-2500-1 requires either a volumetric or a surface examination of the pressure retaining welds in Control Rod Housings. These volumetric examinations are to be performed using ultrasonic techniques in accordance with Paragraph IWA-2232 of Section XI. This paragraph specifies that austenitic and dissimilar metal piping welds are to be examined in accordance with Article 5 of Section V.

2.1.4.2 Justification

Article 5 of Section V does not provide the detailed guidance necessary to examine austenitic and dissimilar metal piping welds with the exception of austenitic piping welds which have been clad overlaid. These clad overlaid piping welds will be examined in accordance with Article 5 of Section V and Appendix III of Section XI.

2.1.4.3 Testing in Lieu of Section XI Requirements

Since ferritic piping welds will be examined per Appendix III of Section XI and to provide consistency, austenitic and dissimilar metal piping welds will be examined in accordance with Appendix III also.

2.1.5 Basic Calibration Blocks for Pipe Weld Examinations

2.1.5.1 Requirement From Which Relief is Requested

Appendix III of Section XI delineates the requirements for the design and fabrication of basic calibration blocks for pipe weld examinations. It specifies that the basic calibration block shall be fabricated with notches and that the basic calibration block nominal diameter and thickness be equivalent to the component to be examined. Relief is requested so that existing basic calibration blocks may be used for pipe weld examinations.

2.1.5.2 Justification

The majority of existing Hatch basic calibration blocks used for pipe weld examinations were fabricated with diameters, thicknesses, and side-drilled holes in accordance with the 1974 Edition of Section V. For the two primary reasons listed below, these same basic calibration blocks will be used to provide the most meaningful and thorough examinations possible:

- (1) Side-drilled holes as calibration reflectors result in a more sensitive ultrasonic examination than one using notches.
- (2) Correlation of ultrasonic data with previous examinations as required by Subarticle IWA-1400 of Section XI makes it necessary that these basic calibration blocks be used so future examination results can be correlated with past results.

2.1.5.3 Testing in Lieu of Section XI Requirements

The basic calibration blocks using holes as calibration reflectors will be used for the majority of the pipe weld examinations.

2.1.6 Reactor Pressure Vessel Nozzle to Safe-End Welds (Nominal Pipe Size < 4 Inches)

2.1.6.1 Requirement From Which Relief is Requested

Item No. B5.11 of Table IWB-2500-1 requires a surface examination of the RPV nozzle to safe-end welds with nominal pipe size <4 inches. Relief from this requirement is requested.

2.1.6.2 Justification

The 2-inch Hatch 2 RPV bottom head drain nozzle to safe-end weld can not be examined due to inaccessibility. Instrumentation lines and control rod housings surround this line and prevent the examiner from performing this examination. The weld listed above is the only one with known limitations.

2.1.6.3 Testing in Lieu of Section XI Requirements

This weld will be tested per IWB-5000 since it is located within the hydrostatic test boundary of the Nuclear Steam Supply system.

2.1.7 Volumetric and Surface Examinations of Pressure Retaining Welds in Piping with Nominal Pipe Size \geq 4 Inches

2.1.7.1 Requirement From Which Relief is Requested

Item No. B9.11 of Table IWB-2500-1 requires the examination of pressure retaining welds in piping that are located within flued head containment penetration assemblies. These welds and their penetration assembly number for Hatch 1 are listed below. Hatch 2 has no pressure retaining welds in the penetration assemblies.

<u>Weld Identification No.</u>	<u>Penetration No.</u>
B21-FW-18A-7A	X-9A
B21-FW-18B-6A	X-9B
E51-RCIC-4-OUT-20A	X-10
E41-HPCI-10-OUT-15A	X-11
E11-RHR-20-B-Discharge-13A	X-12
E11-RHR-24-A-Return-3A	X-13A
E11-RHR-24-B-Return-3B	X-13B
G31-RWC-6-OUT-15B	X-14
G31-RWC-6-OUT-15C	X-14
E21-CORE SPRAY-10-A-3A	X-16A
E21-CORE SPRAY-10-B-4A	X-16B
E11-RHR-4-HS-6A	X-17

2.1.7.2 Justification

These welds are inaccessible for examination due to the design of the flued head. All twelve circumferential butt welds, except the two located in the Reactor Water Cleanup (RWCU) penetration, are carbon steel.

The two stainless steel welds that are located in the RWCU penetration were made to replace a Type 304 SS pipe that had undergone IGSCC. The welds are a flued head with a Type 308L overlay on the inside surface to a Type 304L solution annealed pipe ($\leq 0.035\%$ carbon), and a Type 304L pipe-to-pipe weld. These welds were made in accordance with the guidelines of NUREG-0313 to minimize susceptibility to IGSCC.

2.1.7.3 Testing in Lieu of Section XI Requirements

A UT baseline was run for each new weld while the weld was accessible during the repair to ensure a high quality weld.

In accordance with IWB-5221, a system leakage test is to be performed prior to startup following each reactor refueling outage. This is the same type test that detected the crack in the original pipe.

Whenever the process piping to flued-head weld (outside containment) is volumetrically examined, the accessible weld of the flued-head penetration will have a surface examination performed on it.

2.1.8 ASME Class 1 (Equivalent) Valves Exceeding 4-Inches Nominal Pipe Size and ASME Class 1 (Equivalent) Pump Casings

2.1.8.1 Requirement From Which Relief is Requested

Table IWB-2500-1, Item No. B12.40 requires a visual examination of the internal pressure boundary surfaces of one valve in each group of valves that are of the same constructional design, such as globe, gate, or check valve, and manufacturing method and that are performing similar functions in the system.

Table IWB-2500-1, Item No. B12.20 requires a visual examination of the internal pressure boundary surface of one of the two Reactor Recirculation system pumps.

2.1.8.2 Justification

Disassembly of these valves and pumps for the visual examination during the inspection interval, in the absence of other required maintenance, represents an unnecessary exposure to radiation and contamination. Valves on the Reactor Recirculation (RC) system and the Residual Heat Removal (RHR) system suction lines would require off-loading the fuel elements and draining the RPV prior to disassembly. Work on the RC system pump discharge valves and the RHR system injection valves would require the installation of plugs in the jet pump risers. Preparatory work of this scope is considered impractical for the sole purpose of conducting a visual examination. Contamination levels in the valves and pumps associated with the RC system loops are particularly high due to the physical location at the bottom of the system.

During routine maintenance, the valve body and the pump casing internal surfaces are visually examined. Many of the valves, particularly the containment isolation valves are disassembled for maintenance of leak-tightness. Disassembly of other Class 1 valves and the pumps solely for internal examination is counter to the "ALARA" guidelines to keep the occupational dose rates as low as reasonably achievable. In view of the cost in man-rem and in view of the minimal benefits obtained, we conclude that this Code requirement does not provide sufficient benefits to justify the exposure.

2.1.8.3 Testing in Lieu of Section XI Requirements

Class 1 pumps and Class 1 valves exceeding four inches nominal pipe size are subject to visual examination of the internal surfaces when disassembled for maintenance. The coverage provided by examinations during routine maintenance coupled with periodic leak tests and hydrostatic tests will provide adequate assurance of the structural integrity of the Class 1 pumps and valves, while keeping exposure to radiation and contamination as low as reasonably achievable.

2.1.9 Pressure Retaining Welds in Control Rod Housings

2.1.9.1 Requirement From Which Relief is Requested

Table IWB-2500-1, Item No. B14.10 requires a volumetric or surface examination of the pressure retaining welds in 10% of the peripheral control rod housings. Each housing has a lower weld located at the housing flange.

2.1.9.2 Justification

The lower welds are inaccessible for examination because of the location and design of the housings. Physical accessibility by an examiner is extremely limited by the close proximity of the housings to each other and by the support arrangement. Also, the insert and withdraw lines to the Control Rod Drive system are connected at the top of the housing flange and prevent access to much of the weld. The combination of these factors prevents these welds from being examined.

2.1.9.3 Testing in Lieu of Section XI Requirements

These welds will be tested per IWB-5000 since they are located within the hydrostatic test boundary of the Nuclear Steam Supply system.

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B1.11	B-A	Reactor Pressure Vessel	Circumferential Shell Welds	Volumetric	Yes, 2.1.1 and 2.1.2
B1.12	B-A	Reactor Pressure Vessel	Longitudinal Shell Welds	Volumetric	Yes, 2.1.1 and 2.1.2
B1.21	B-A	Reactor Pressure Vessel and Closure Head	Circumferential Head Welds	Volumetric	Yes, 2.1.1 and 2.1.2
B1.22	B-A	Reactor Pressure Vessel and Closure Head	Meridional Head Welds	Volumetric	Yes, 2.1.1 and 2.1.2
B1.30	B-A	Reactor Pressure Vessel	Shell-to-Flange Weld	Volumetric	Yes, 2.1.2
B1.40	B-A	Reactor Pressure Vessel Closure Head	Head-to-Flange Weld	Surface and Volumetric	Yes, 2.1.2
B1.50	B-A	Reactor Pressure Vessel	Beltline Region Repair Welds	Volumetric	Not applicable to either Hatch unit
B2.10	B-B	Pressurizer	Shell-to-Head Welds	Volumetric	Not applicable to either Hatch unit
B2.20	B-B	Pressurizer	Head Welds	Volumetric	Not applicable to either Hatch unit
B2.30	B-B	Steam Generator (Primary Side)	Head Welds	Volumetric	Not applicable to either Hatch unit
B2.40	B-B	Steam Generator (Primary Side)	Tubesheet-to-Head Welds	Volumetric	Not applicable to either Hatch unit
B2.50	B-B	Heat Exchangers (Primary Side)	Shell or Head Welds	Volumetric	Not applicable to either Hatch unit
B2.60	B-B	Heat Exchangers (Primary Side)	Tubesheet-to-Shell (or Head) Welds	Volumetric	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B3.10	B-D	Reactor Pressure Vessel	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit; GPC has elected to perform examinations in accordance with Program B.
B3.20	B-D	Reactor Pressure Vessel	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit; GPC has elected to perform examinations in accordance with Program B.
B3.30	B-D	Pressurizer	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit
B3.40	B-D	Pressurizer	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit
B3.50	B-D	Steam Generators (Primary Side)	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit
B3.60	B-D	Steam Generators (Primary Side)	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit
B3.70	B-D	Heat Exchangers (Primary Side)	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B3.80	B-D	Heat Exchangers (Primary Side)	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit
B3.90	B-D	Reactor Pressure Vessel	Nozzle-to-Vessel Welds	Volumetric	Yes, 2.1.2 and 2.1.3
B3.100	B-D	Reactor Pressure Vessel	Nozzle Inside Radius Section	Volumetric	Yes, 2.1.3
B3.110	B-D	Pressurizer	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit
B3.120	B-D	Pressurizer	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit
B3.130	B-D	Steam Generators (Primary Side)	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit
B3.140	B-D	Steam Generators (Primary Side)	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit
B3.150	B-D	Heat Exchangers (Primary Side)	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit
B3.160	B-D	Heat Exchangers (Primary Side)	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit
B4.11	B-E	Vessel Nozzles	External Surfaces of Partial Penetration Welds	Visual,VT-2	No
B4.12	B-E	Control Rod Drive Nozzles	External Surfaces of Partial Penetration Welds	Visual,VT-2	No
B4.13	B-E	Instrumentation Nozzles	External Surfaces of Partial Penetration Welds	Visual,VT-2	No
B4.20	B-E	Pressurizer	External Surfaces of Heater Penetration Welds	Visual,VT-2	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B5.10	B-F	Reactor Pressure Vessel	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size ≥ 4 in.)	Surface and Volumetric	Yes, 2.1.4; 2.1.5
B5.11	B-F	Reactor Pressure Vessel	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size < 4 in.)	Surface	Yes, 2.1.6
B5.12	B-F	Reactor Pressure Vessel	Nozzle-to-Safe End Socket Welds	Surface	Not applicable to either Hatch unit
B5.20	B-F	Pressurizer	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size ≥ 4 in.)	Surface and Volumetric	Not applicable to either Hatch unit
B5.21	B-F	Pressurizer	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size < 4 in.)	Surface	Not applicable to either Hatch unit
B5.22	B-F	Pressurizer	Nozzle-to-Safe End Socket Welds	Surface	Not applicable to either Hatch unit
B5.30	B-F	Steam Generators (Primary Side)	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size ≥ 4 in.)	Surface and Volumetric	Not applicable to either Hatch unit
B5.31	B-F	Steam Generators (Primary Side)	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size < 4 in.)	Surface	Not applicable to either Hatch unit
B5.32	B-F	Steam Generators (Primary Side)	Nozzle-to-Safe End Socket Welds	Surface	Not applicable to either Hatch unit
B5.40	B-F	Heat Exchangers (Primary Side)	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size ≥ 4 in.)	Surface and Volumetric	Not applicable to either Hatch unit
B5.41	B-F	Heat Exchangers (Primary Side)	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size < 4 in.)	Surface	Not applicable to either Hatch unit
B5.42	B-F	Heat Exchangers (Primary Side)	Nozzle-to-Safe End Socket Welds	Surface	Not applicable to either Hatch unit
B5.50	B-F	Piping	Dissimilar Butt Welds (Nominal Pipe Size ≥ 4 in.)	Surface and Volumetric	Yes, 2.1.4 and 2.1.5

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B5.51	B-F	Piping	Dissimilar Butt Welds (Nominal Pipe Size < 4in.)	Surface	Not applicable to either Hatch unit
B5.52	B-F	Piping	Dissimilar Metal Socket Welds	Surface	Not applicable to either Hatch unit
B6.10	B-G-1	Reactor Pressure Vessel	Closure Head Nuts	Surface	No
B6.20	B-G-1	Reactor Pressure Vessel	Closure Studs, in place	Volumetric	No, See Note 1
B6.30	B-G-1	Reactor Pressure Vessel	Closure Studs, when removed	Surface and Volumetric	No, See Note 1
B6.40	B-G-1	Reactor Pressure Vessel	Threads in Flange	Volumetric	No
B6.50	B-G-1	Reactor Pressure Vessel	Closure Washers, Bushings	Visual, VT-1	No
B6.60	B-G-1	Pressurizer	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
B6.70	B-G-1	Pressurizer	Flange Surface, when Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.80	B-G-1	Pressurizer	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B6.90	B-G-1	Steam Generator	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
B6.100	B-G-1	Steam Generator	Flange Surface, when Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.110	B-G-1	Steam Generator	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B6.120	B-G-1	Heat Exchangers	Bolts and Studs	Volumetric	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B6.130	B-G-1	Heat Exchangers	Flange Surface, when Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.140	B-G-1	Heat Exchangers	Nuts, Bushing, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B6.150	B-G-1	Piping	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
B6.160	B-G-1	Piping	Flange Surface, when Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.170	B-G-1	Piping	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B6.180	B-G-1	Pumps	Bolts and Studs	Volumetric	No
B6.190	B-G-1	Pumps	Flange Surface, when Connection Disassembled	Visual, VT-1	No
B6.200	B-G-1	Pumps	Nuts, Bushings, and Washers	Visual, VT-1	No
B6.210	B-G-1	Valves	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
B6.220	B-G-1	Valves	Flange Surface, when Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.230	B-G-1	Valves	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B7.10	B-G-2	Reactor Pressure Vessel	Bolts, Studs, and Nuts	Visual, VT-1	No
B7.20	B-G-2	Pressurizer	Bolts, Studs, and Nuts	Visual, VT-1	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B7.30	B-G-2	Steam Generators	Bolts, Studs, and Nuts	Visual, VT-1	Not applicable to either Hatch unit
B7.40	B-G-2	Heat Exchangers	Bolts, Studs, and Nuts	Visual, VT-1	Not applicable to either Hatch unit
B7.50	B-G-2	Piping	Bolts, Studs, and Nuts	Visual, VT-1	No
B7.60	B-G-2	Pumps	Bolts, Studs, and Nuts	Visual, VT-1	No
B7.70	B-G-2	Valves	Bolts, Studs, and Nuts	Visual, VT-1	No
B7.80	B-G-2	CRD Housings	Bolts, Studs, and Nuts	Visual, VT-1	No
B8.10	B-H	Reactor Pressure Vessel	Integrally Welded Attachments	Volumetric or Surface, as Applicable	No
B8.20	B-H	Pressurizer	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Not applicable to either Hatch unit
B8.30	B-H	Steam Generators	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Not applicable to either Hatch unit
B8.40	B-H	Heat Exchangers	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Not applicable to either Hatch unit
B9.11	B-J	Piping	Circumferential Welds (Nominal Pipe Size ≥ 4 in.)	Surface and Volumetric	Yes, 2.1.4; 2.1.5; and 2.1.7

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B9.12	B-J	Piping	Longitudinal Welds (Nominal Pipe Size \geq 4 in.)	Surface and Volumetric	Yes, 2.1.4 and 2.1.5
B9.21	B-J	Piping	Circumferential Welds (Nominal Pipe Size $<$ 4 in.)	Surface	No
B9.22	B-J	Piping	Longitudinal Welds (Nominal Pipe Size $<$ 4 in.)	Surface	No
B9.31	B-J	Piping	Branch Pipe Connection Welds (Nominal Pipe Size \geq 4 in.)	Surface and Volumetric	Yes, 2.1.4 and 2.1.5
B9.32	B-J	Piping	Branch Pipe Connection Welds (Nominal Pipe Size $<$ 4 in.)	Surface	No
B9.40	B-J	Piping	Socket Welds	Surface	No, See Note 2
B10.10	B-K-1	Piping	Integrally Welded Attachments	Volumetric or Surface, as Applicable	No
B10.20	B-K-1	Pumps	Integrally Welded Attachments	Volumetric or Surface, as Applicable	No
B10.30	B-K-1	Valves	Integrally Welded Attachments	Volumetric or Surface, as Applicable	No
B12.10	B-L-1	Pumps	Pump Casing Welds	Volumetric	Not applicable to either Hatch unit
B12.20	B-L-2	Pumps	Pump Casing	Visual, VT-3	Yes, 2.1.8
B12.30	B-M-1	Valves	Valve Body Welds (Nominal Pipe Size $<$ 4 in.)	Surface	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B12.31	B-M-1	Valves	Valve Body Welds (Nominal Pipe Size \geq 4 in.)	Volumetric	Not applicable to either Hatch unit
B12.40	B-M-2	Valves	Valve Body (Nominal Pipe Size $>$ 4 in.)	Visual, VT-3	Yes, 2.1.8
B13.10	B-N-1	Reactor Pressure Vessel	Vessel Interior	Visual, VT-3	No
B13.20	B-N-2	Reactor Pressure Vessel (PWR)	Interior Attachments	Visual, VT-1	No
B13.21	B-N-2	Reactor Pressure Vessel (BWR)	Core Support Structure	Visual, VT-1	No
B13.30	B-N-3	Reactor Pressure Vessel (BWR)	Core Support Structure	Visual, VT-3	Not applicable to either Hatch unit
B14.10	B-O	Reactor Pressure Vessel	Welds in Control Rod Drive Housing	Volumetric or Surface	Yes, 2.1.4, 2.1.5, and 2.1.9
B15.10	B-P	Reactor Pressure Vessel	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	No
B15.11	B-P	Reactor Pressure Vessel	Pressure Retaining Boundary	System Hydro-test; Visual, VT-2	No
B15.20	B-P	Pressurizer	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	Not applicable to either Hatch unit
B15.21	B-P	Pressurizer	Pressure Retaining Boundary	System Hydro-test; Visual, VT-2	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

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<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B15.30	B-P	Steam Generators	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	Not applicable to either Hatch unit
B15.31	B-P	Steam Generators	Pressure Retaining Boundary	System Hydrotest; Visual, VT-2	Not applicable to either Hatch unit
B15.40	B-P	Heat Exchangers	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	Not applicable to either Hatch unit
B15.41	B-P	Heat Exchangers	Pressure Retaining Boundary	System Hydrotest; Visual, VT-2	Not applicable to either Hatch unit
B15.50	B-P	Piping	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	No
B15.51	B-P	Piping	Pressure Retaining Boundary	System Hydrotest; Visual, VT-2	No
B15.60	B-P	Pumps	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	No
B15.61	B-P	Pumps	Pressure Retaining Boundary	System Hydrotest; Visual, VT-2	No
B15.70	B-P	Valves	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	No

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
B15.71	B-P	Valves	Pressure Retaining Boundary	System Hydro-test; Visual, /T-2	No
B16.10	B-Q	Steam Generator Tubing	Straight Tube Design	Volumetric	Not applicable to either Hatch unit
B16.20	B-Q	Steam Generator Tubing	U-Tube Design	Volumetric	Not applicable to either Hatch unit
--	--	Reactor Pressure Vessel Closure Head	Head Thickness Measurements	Ultrasonic	No, See Note 3

Notes for Table 1

- (1) During each refueling outage, the reactor pressure vessel (RPV) closure studs are normally left in place; therefore, only a volumetric examination will be performed (Table IWB-2500-1, Item No. B6.20). If the studs are removed, both a surface and volumetric examination will be performed (Table IWB-2500-1, Item No. B6.30).
- (2) The Class 1 socket welds (Item No. B9.40 of Table IWB-2500-1) for both units are exempted from surface examination by paragraph IWB-1220(a). However, selected austenitic piping welds may be examined by PT techniques.
- (3) Ultrasonic thickness measurements have been performed each refueling outage on the RPV closure head at both units (Hatch 1-six outages and Hatch 2-three outages) to determine if thinning has occurred. These measurements have found no apparent thinning and therefore, these examinations will be performed once every 40-months at each unit.

3.0 INSERVICE INSPECTION FOR CLASS 2 COMPONENTS

Table 2 provides a tabulation of the Class 2 pressure-retaining components subject to the inspection requirements of Subsection IWC of Section XI of the ASME Boiler and Pressure Vessel Code, 1980 Edition with Addenda through Winter 1980. These components will be inspected in accordance with the requirements of Subsection IWC to the extent practical. This tabulation identifies the components to be inspected, the Section XI examination item and category, area to be examined, and the method of examination. Where relief from the inspection requirements of Subsection IWC is requested, information is provided which identifies the applicable Code requirements, justification for the relief request, and the examination method to be used as an alternative. Table IWC-2500-1 items not applicable to the Hatch Plant have also been listed and identified in the interest of completeness.

Hydrostatic testing will be conducted in a manner that will satisfy the requirements of IWA-5000 and IWC-5000. Where adjoining pipe sections have different test pressures, they will be separated whenever practicable and each section tested at its specified pressure. Where it is not practicable to separate adjoining sections of piping (e.g., boundary is a check valve), the sections will be tested together at the lower of the specified test pressures. No point in the piping will be permitted to experience a pressure greater than the specified test pressure.

Components exempted from volumetric and surface examination by IWC-1220 will be hydrostatically tested per the requirements of IWA-5000 and IWC-5000.

3.1 Requests for Relief From ASME Section XI Requirements

3.1.1 Volumetric Examination of Pressure Retaining Welds in Class 2 Vessels

3.1.1.1 Requirement From Which Relief is Requested

Item Nos. C1.10, C1.20, and C1.30 of Table IWC-2500-1 require the volumetric examination of Class 2 vessel shell circumferential, head circumferential, and tubesheet to shell circumferential welds, respectively. The volumetric examination of the Residual Heat Removal (RHR) system heat exchanger circumferential welds will be performed using ultrasonic techniques. The required examination volumes are shown in Figures IWC-2500-1 and -2. Relief from this requirement is requested.

3.1.1.2 Justification

The shell and head circumferential weld examinations are limited by vessel supports adjacent to these welds. In addition, the ultrasonic examination of the head circumferential weld from the head side cannot be performed due to configuration. The examination volume as required by Figure IWC-2500-2 for the tubesheet to shell weld cannot fully be met due to the configuration.

3.1.1.3 Testing in Lieu of Section XI Requirements

The ultrasonic examination of the shell and head circumferential welds will be supplemented by a surface examination. The tubesheet to shell weld cannot be properly prepared for surface examination nor can the examination be performed due to the tubesheet studs and nuts adjacent to the weld. In addition to the examinations described above, system pressure tests per Article IWC-5000 will be performed on these welds.

3.1.2 Basic Calibration Blocks for Pipe Weld Examinations

3.1.2.1 Requirement From Which Relief is Requested

Appendix III of Section XI delineates the requirements for the design and fabrication of basic calibration blocks for pipe weld examinations. It specifies that the basic calibration block shall be fabricated with notches and that the basic calibration block nominal diameter and thickness be equivalent to the component to be examined. Relief is requested so that existing basic calibration blocks may be used for pipe weld examinations.

3.1.2.2 Justification

The majority of existing Hatch basic calibration blocks used for pipe weld examinations were fabricated with diameters, thicknesses, and side-drilled holes in accordance with the 1974 Edition of Section V. For the two primary reasons listed below, these same basic calibration blocks will be used to provide the most meaningful and thorough examinations possible:

1. Side drilled holes as calibration reflectors result in a more sensitive ultrasonic examination than one using notches.
2. Correlation of ultrasonic data with previous examinations as required by Subarticle IWA-1400 of Section XI makes it necessary that these basic calibration blocks be used so future examination results can be correlated with past results.

3.1.2.3 Testing in Lieu of Section XI Requirements

The basic calibration blocks using holes as calibration reflectors will be used for the majority of the pipe weld examinations.

3.1.3 Surface Examination of Pressure Retaining Welds in Class 2 Pumps

3.1.3.1 Requirement From Which Relief is Requested

Item No. C6.10 of Table IWC-2500-1 requires a surface examination of the pump casing welds from one Class 2 pump in each group of pumps that are of similar design, size, function, and service in a system. Relief from this requirement is requested.

3.1.3.2 Justification

Disassembly of these pumps for the surface examination during the inspection interval, in the absence of other required maintenance, represents an unnecessary exposure to radiation and contamination. During routine maintenance, the pump casing welds receive a surface examination. In view of the cost in man-rem and in view of the minimal benefits obtained, we conclude that this Code requirement does not provide a corresponding benefit in reliability.

3.1.3.3 Testing in Lieu of Section XI Requirements

Class 2 pump casing welds are subject to surface examination when disassembled for maintenance. The coverage provided by examinations during routine maintenance coupled with hydrostatic tests will provide adequate assurance of the structural integrity of these pumps, while keeping exposure to radiation and contamination as low as reasonably achievable.

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Sh. 1 of 3

<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
C1.10	C-A	Pressure Vessels	Shell Circumferential Welds	Volumetric	Yes, 3.1.1
C1.20	C-A	Pressure Vessels	Head Circumferential Welds	Volumetric	Yes, 3.1.1
C1.30	C-A	Pressure Vessels	Tubesheet-to-Shell Weld	Volumetric	Yes, 3.1.1
C2.10	C-B	Pressure Vessels	Nozzles in Vessels $\leq 1/2$ inch Nominal Thickness	Surface	Not applicable to either Hatch unit
C2.21	C-B	Pressure Vessels	Nozzle-to-Shell (or Head) Weld for Vessels $> 1/2$ Inch Nominal Thickness	Surface and Volumetric	No
C2.22	C-B	Pressure Vessels	Nozzle Inside Radius Section for Vessels $> 1/2$ -Inch Nominal Thickness	Volumetric	No
C3.10	C-C	Pressure Vessels	Integrally Welded Attachments	Surface	No
C3.40	C-C	Piping	Integrally Welded Attachments	Surface	No
C3.70	C-C	Pumps	Integrally Welded Attachments	Surface	Not applicable to either Hatch unit
C3.100	C-C	Valves	Integrally Welded Attachments	Surface	Not applicable to either Hatch unit
C4.10	C-F	Pressure Vessels	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
C4.20	C-F	Piping	Bolts and Studs	Volumetric	Not applicable to either Hatch unit

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Sh. 2 of 3

<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
C4.30	C-D	Pumps	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
C4.40	C-D	Valves	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
C5.11	C-F	Piping	Circumferential Welds (Nominal Wall Thickness $\leq 1/2$ in.)	Surface	No
C5.12	C-F	Piping	Longitudinal Welds (Nominal Wall Thickness $\leq 1/2$ in.)	Surface	No
C5.21	C-F	Piping	Circumferential Welds (Nominal Wall Thickness $> 1/2$ in.)	Surface and Volumetric	Yes, 3.1.2
C5.22	C-F	Piping	Longitudinal Welds (Nominal Wall Thickness $> 1/2$ in.)	Surface and Volumetric	Yes, 3.1.2
C5.31	C-F	Piping	Circumferential Welds Pipe Branch Connections	Surface	No
C5.32	C-F	Piping	Longitudinal Welds Pipe Branch Connections	Surface	Not applicable to either Hatch unit
C6.10	C-G	Pumps	Pump Casing Welds	Surface	Yes, 3.1.3
C6.20	C-G	Valves	Valve Body Welds	Surface	Not applicable to either Hatch unit
C7.10	C-H	Pressure Vessels	Pressure Retaining Components	System Pressure Test; Visual, VT-2	No
C7.11	C-H	Pressure Vessels	Pressure Retaining Components	System Hydrostatic Test; Visual, VT-2	No

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Sh. 3 of 3

<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
C7.20	C-H	Piping	Pressure Retaining Components	System Pressure Test; Visual, VT-2	No
C7.21	C-H	Piping	Pressure Retaining Components	System Hydrostatic Test; Visual, VT-2	No
C7.30	C-H	Pumps	Pressure Retaining Components	System Pressure Test; Visual, VT-2	No
C7.31	C-H	Pumps	Pressure Retaining Components	System Hydrostatic test; Visual, VT-2	No
C7.40	C-H	Valves	Pressure Retaining Components	System Pressure Test; Visual, VT-2	No
C7.41	C-H	Valves	Pressure Retaining Components	System Hydrostatic Test; Visual, VT-2	No

4.0 INSERVICE INSPECTION FOR CLASS 3 COMPONENTS

Table IWD-2500-1 provides a tabulation of the Class 3 pressure-retaining components subject to the inspection requirements of Subsection IWD of Section XI of the ASME Boiler and Pressure Vessel Code, 1980 Edition with Addenda through Winter 1980. These components will be inspected in accordance with Subsection IWD to the extent practical with the exception of the relief requests outlined in Paragraph 4.1 below. Where adjoining pipe sections have different test pressures, they will be separated whenever practicable and each section tested at its specified pressure. Where it is not practicable to separate adjoining sections of piping (e.g., boundary is a check valve), the sections will be tested together at the lower of the specified pressures. No point in the piping will be pressurized above the specified test pressure.

4.1 Requests for Relief From ASME Section XI Requirements

4.1.1 System Pressure Tests on Class 3 Small Diameter Piping

4.1.1.1 Requirement From Which Relief is Requested

Table IWD-2500-1 requires a system pressure test for Class 3 lines regardless of size.

4.1.1.2 Justification

The system pressure test requirements for Class 3 will not be performed on lines two inches and smaller unless:

- a. They are connected to larger lines which will be pressure tested.
- b. Isolation valves are not provided so that these smaller lines may be isolated in case of leakage.

These smaller lines have wall thicknesses in excess of what ASME Section III requires for retaining internal pressure. Using heavier walled piping in these small lines essentially means they are over-designed for the pressure they are retaining and are not susceptible to the type leakages found during hydrostatic testing.

4.1.1.3 Testing in Lieu of Section XI Requirements

Accessible piping two inches and smaller will be visually examined under normal operating pressure.

4.1.2 System Pressure Tests on Class 3 Buried Piping

4.1.2.1 Requirement From Which Relief is Requested

Table IWD-2500-1 requires a system pressure test for Class 3 components including buried piping.

4.1.2.2 Justification

The service water systems were designed without including provisions for testing buried piping as required by Paragraph IWA-5244. In addition, the visual examination for leakage at the ground level is not feasible since a majority of the piping is buried under asphalt.

4.1.2.3 Testing in Lieu of Section XI Requirements

Normal system functional testing demonstrates leaktight integrity of all buried piping.

5.0 INSERVICE INSPECTION FOR CLASS 1, 2, AND 3 COMPONENT SUPPORTS

Table 3 provides a tabulation of the Class 1, 2, and 3 component supports subject to the inspection requirements of Subsection IWF of Section XI of the ASME Boiler and Pressure Vessel Code, 1980 Edition with Addenda through Winter 1980. These components will be inspected in accordance with the requirements of Subsection IWF to the extent practical. This tabulation identifies the components to be inspected, the Section XI examination item and category, area to be examined, and the method of examination. Where relief from the inspection requirements of Subsection IWF is requested, information is provided which identifies the applicable Code requirements, justification for the relief request, and the examination method to be used as an alternative. Table IWF-2500-2 items not applicable to the Hatch Plant have also been listed and identified in the interest of completeness.

Paragraph IWF-1230 titled Supports Exempt from Examination and Test is in the course of preparation. Later Addenda and the 1983 Edition of Section XI do not provide guidance for the exemption criteria for these components. Georgia Power Company has therefore decided to incorporate the exemption criteria for Class 1, Class 2, and Class 3 component supports found in Paragraphs IWB-1220, IWC-1220, and IWD-1220, respectively.

Article IWF-5000 outlines the inservice test requirements for hydraulic and mechanical snubbers. However, snubbers on Class 1, 2, and 3 systems are currently subject to an ongoing testing program per the plant technical specifications. This program is designed to demonstrate the functional integrity of the snubbers and exceeds the requirements of Article IWF-5000.

TABLE 3
ISI PROGRAM FOR ASME CLASS 1, 2, AND 3 SUPPORT COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Sh. 1 of 2

<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
F-1	F-A	Component Supports	Mechanical Attachments, Including Bolting	Visual, VT-3	No
F-1	F-B	Component Supports	Mechanical Attachments, Including Bolting	Visual, VT-3	No
F-1	F-C	Component Supports	Mechanical Attachments, Including Bolting	Visual, VT-3	No
F-2	F-A	Component Supports	Welded Attachments	Visual, VT-3	No
F-2	F-B	Component Supports	Welded Attachments	Visual, VT-3	No
F-2	F-C	Component Supports	Welded Attachments	Visual, VT-3	No
F-3	F-A	Component Supports	Component Displacement; Settings of Guides and Stops; Misalignment of Supports; and Assembly of Support Items	Visual, VT-3	No
F-3	F-B	Component Supports	Component Displacement; Settings of Guides and Stops; Misalignment of Supports; and Assembly of Support Items	Visual, VT-3	No
F-3	F-C	Component Supports	Component Displacement; Settings of Guides and Stops; Misalignment of Supports; and Assembly of Support Items	Visual, VT-3	No

TABLE 3
ISI PROGRAM FOR ASME CLASS 1, 2, AND 3 SUPPORT COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Sh. 2 of 2

<u>Item No.</u>	<u>Examination Category</u>	<u>System or Component Description</u>	<u>Area(s) To Be Examined</u>	<u>Method of Examination</u>	<u>Code Relief Requested</u>
F-4	F-C	Component Supports	Spring Type Supports; Constant Load Type Supports; Shock Absorbers; Hydraulic and Mechanical Type Snubbers	Visual, VT-4	No

6.0 INSERVICE INSPECTION OF VALVES

The valve testing program is based on the 1980 Edition of Section XI with Addenda through Winter 1980. Valves in the program are listed in the valve test tables and will be tested in accordance with the code unless otherwise specified. Several features of the program are discussed below:

Containment Isolation Valves (CIVs)

Containment Isolation Valves will have a type C leakage test performed per the requirements of 10 CFR 50, Appendix J. In addition, each valve or penetration will have a specific leakage limit assigned to it by Georgia Power Company. Limits will be based on type of valve, size of valve, the number of valves tested in parallel paths, and historical leakage data. These limits are available for review in the Long-Term Inservice Inspection Pump and Valve Test Plans stored in the Plant Hatch Document Control room.

Pressure Isolation Valves

Pressure Isolation valves, as a rule, will be tested in the same manner as the CIVs and the observed leakage escalated per IWV-3423 to the function maximum pressure differential value. The maximum leakage for each valve will be .5 gpm per inch of nominal valve size or a maximum of 5 gpm (water). If air is used as the test medium the leakage will be conservatively assumed to be water leakage, or a correlation between air and water leakage will be derived and submitted to the NRC for review.

Valves to be Tested During Cold Shutdown and Refueling

Valve testing will commence as soon as possible into the cold shutdown but no later than 48 hours after the shutdown. Valve testing will continue during the shutdown until complete or until plant startup and return to power. Any testing not completed at one cold shutdown will be performed during subsequent cold shutdowns before the next refueling.

During refueling, any valve scheduled for a refueling test will be tested. Also, any valve identified to be tested at cold shutdown that has not been tested during the previous three months will be tested during the refueling.

Remote Indicating Lights

Valves with remote indicating lights will be observed at least once every 2 years to verify that the valve operation is accurately indicated.

Fail-Safe Valves

Unless otherwise specified in the program tables the only fail-safe valves are either air operated or solenoid valves. Stroking the valve full cycle during normal testing causes loss of power to the actuator as required by IWV-3415. Therefore, additional testing to prove the fail-safe capability will not be performed.

Control Rod Drive System Valves

See Relief Request 6.1.22

Valves Testing During Cold Shutdown

See Relief Requests 6.1.9 and 6.1.19.

In additon to the Relief Requests addressed above, relief is specifically requested for each valve in the Valve Test Project Tables as required. All relief requests are located following these tables.

SYSTEM: Main Steam & Feedwater

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
B21-F010A	1	AC	18" Check	3-E	H-16062	FW Inbrd.Cont.Iso.	0	RO	CIV	No	6.1.1
B21-F010B	1	AC	18" Check	3-D	H-16062	FW Inbrd.Cont.Iso.	0	RO	CIV	No	6.1.1
B21-F013A	1	C	6" Relief	C-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013B	1	C	6" Relief	C-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013C	1	C	6" Relief	F-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013D	1	C	6" Relief	F-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013E	1	C	6" Relief	F-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013F	1	C	6" Relief	F-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013G	1	C	6" Relief	F-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013H	1	C	6" Relief	G-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013J	1	C	6" Relief	G-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013K	1	C	6" Relief	F-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F013L	1	C	6" Relief	F-6	H-16062	Main Steam Relief	-	Note 3	NA	No	
B21-F016	1	A	3" MO Gate	E-8	H-16062	Main Steam Line DRN. Inb. Iso.	C	Note 1	CIV	No	6.1.2
B21-F019	1	A	3" MO Gate	E-9	H-16062	Main Steam Line DRN. Inb. Iso.	C	Note 1	CIV	No	
B21-F022A	1	A	24" AO Globe	C-7	H-16062	MSIV	0	Qtr.	CIV	Yes	
B21-F022B	1	A	24" AO Globe	E-7	H-16062	MSIV	0	Qtr.	CIV	Yes	
B21-F022C	1	A	24" AO Globe	F-7	H-16062	MSIV	0	Qtr.	CIV	Yes	

SYSTEM: Main Steam & Feedwater

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
B21-F022D	1	A	24" AO Globe	G-7	H-16062	MSIV	0	Qtr.	CIV	Yes	
B21-F028A	1	A	24" AO Globe	C-9	H-16062	MSIV	0	Qtr.	CIV	Yes	
B21-F028B	1	A	24" AO Globe	E-9	H-16062	MSIV	0	Qtr.	CIV	Yes	
B21-F028C	1	A	24" AO Globe	F-9	H-16062	MSIV	0	Qtr.	CIV	Yes	
B21-F028D	1	A	24" AO Globe	G-9	H-16062	MSIV	0	Qtr.	CIV	Yes	
B21-F032A	1	AC	18" Check	E-2	H-16062	FW Outboard Iso	0	RO	CIV	No	6.1.1
B21-F032B	1	AC	18" Check	D-2	H-16062	FW Outboard Iso	0	RO	CIV	No	6.1.1
B21-F037A	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037B	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037C	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037D	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037E	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037F	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037G	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3

SYSTEM: Main Steam & Feedwater

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
B21-F037H	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037J	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037K	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
B21-F037L	3	C	6" Check	H-6	H-16062	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3

SYSTEM: Reactor Recirculation System

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
B31-F013A	1	AC	3/4" Check	F-3	H-16066	Recir. Pump Seal Wtr	0	RO	CIV	No	6.1.1
B31-F013B	1	AC	3/4" Check	F-3	H-16066	Recir. Pump Seal Wtr	0	RO	CIV	No	6.1.1
B31-F017A	1	AC	3/4" Check	F-2	H-16066	Recir. Pump Seal Wtr	0	RO	CIV	No	6.1.1
B31-F017B	1	AC	3/4" Check	F-2	H-16066	Recir. Pump Seal Wtr	0	RO	CIV	No	6.1.1
B31-F019	1	A	3/4" AO Globe	D-3	H-16066	Reac. Sample Sys. Inbrd. Iso	0	Qtr	CIV	Yes	
B31-F020	1	A	3/4" AO Globe	D-1	H-16066	Reac. Sample Sys. Inbrd. Iso	0	Qtr	CIV	Yes	
B31-F031A	1	B	28" MO Gate	G-7	H-16066	Reactor Recirculation	0	CS	NA	Yes	6.1.4
B31-F031B	1	B	28" MO Gate	H-7	H-16066	Reactor Recirculation	0	CS	NA	Yes	6.1.4

SYSTEM: Standby Liquid Control System

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
C41-F004A	2	D	1-1/2" Expl	D-3	H-16061	SLC Explo Act	C	Note 4	NA	No	
C41-F004B	2	D	1-1/2" Expl	F-3	H-16061	SLC Explo Act	C	Note 4	NA	No	
C41-F006	1	AC	1-1/2" Check	E-2	H-16061	SLC Outbrd Cont. Iso	C	18 mos.	CIV	No	6.1.5
C41-F007	1	AC	1-1/2" Check	E-2	H-16061	SLC Outbrd Cont. Iso	C	18 mos.	CIV	No	
C41-F029A	2	C	1" Relief	D-6	H-16061	SLC Pump Disch. Relief	C	Note 3	NA	No	
C41-F029B	2	C	1" Relief	G-6	H-16061	SLC Pump Disch. Relief	C	Note 3	NA	No	
C41-F033A	2	C	1-1/2" Check	E-5	H-16061	SLC Pump Disch.	C	Qtr.	NA	No	
C41-F033B	2	C	1-1/2" Check	G-5	H-16061	SLC Pump Disch.	C	Qtr.	NA	No	

SYSTEM: Residual Heat Removal

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E11-F003A	2	B	16" MO Gate Vlv	D-9	H-16330	RHR Hx Shell Side Outlet	0	Qtr	NA	Yes	
E11-F003B	2	B	16" MO Gate Vlv	D-4	H-16329	RHR Hx Shell Side Outlet	0	Qtr	NA	Yes	
E11-F004A	2	A	24" MO Gate Vlv	F-10	H-16330	RHR Pump Suction Torus Iso	0	Qtr	CIV	Yes	
E11-F004B	2	A	24" MO Gate Vlv	F-3	H-16329	RHR Pump Suction Torus Iso	0	Qtr	CIV	Yes	
E11-F004C	2	A	24" MO Gate Vlv	F-10	H-16330	RHR Pump Suction Torus Iso	0	Qtr	CIV	Yes	
E11-F004D	2	A	24" MO Gate Vlv	F-3	H-16329	RHR Pump Suction Torus Iso	0	Qtr	CIV	Yes	
E11-F006A	2	B	20" MO Gate Vlv	F-10	H-16330	RHR Shutdown Cooling Sys	C	Qtr	NA	Yes	
E11-F006B	2	B	20" MO Gate Vlv	F-2	H-16329	RHR Shutdown Cooling Sys	C	Qtr	NA	Yes	
E11-F006C	2	B	20" MO Gate Vlv	F-10	H-16330	RHR Shutdown Cooling Sys	C	Qtr	NA	Yes	
E11-F006D	2	B	20" MO Gate Vlv	F-2	H-16329	RHR Shutdown Cooling Sys	C	Qtr	NA	Yes	
E11-F007A	2	A	4" MO Gate Vlv	E-7	H-16330	RHR Pump Min Flow Torus Iso	0	Qtr	CIV	Yes	6.1.2
E11-F007B	2	A	4" MO Gate Vlv	D-5	H-16329	RHR Pump Min Flow	0	Qtr	CIV	Yes	6.1.2

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E11-F008	1	A	20" MO Gate	D-1	H-16329	RHR Shutdown Cooling Outbrd Iso	C	Note 1	PIV	No	
E11-F009	1	A	20" MO Gate	D-1	H-16329	RHR Shutdown Cooling Outbrd Iso	C	Note 1	PIV	No	
E11-F011A	2	A	4" MO Gate	D-3	H-16330	RHR Cond. Disch. to Torus	C	Qtr	CIV	Yes	6.1.2
E11-F011B	2	A	4" MO Gate	C-9	H-16329	RHR Cond. Disch. to Torus	C	Qtr	CIV	Yes	6.1.2
E11-F015A	1	A	24" MO Gate	C-8	H-16330	LPCI Outbrd, Cont. Iso	C	Qtr	PIV	Yes	
E11-F015B	1	A	24" MO Gate	C-4	H-16329	LPCI Outbrd, Cont. Iso	C	Qtr	PIV	Yes	
E11-F016A	2	A	16" MO Gate	B-9	H-16330	Cont. Spray Outbrd. Iso	C	Qtr	CIV	Yes	
E11-F016B	2	A	16" MO Gate	B-4	H-16329	Cont. Spray Outbrd. Iso	C	Qtr	CIV	Yes	
E11-F017A	1	B	24" MO Gate	D-8	H-16330	LPCI	O	Qtr	NA	Yes	
E11-F017B	1	B	24" MO Gate	D-5	H-16329	LPCI	O	Qtr	NA	Yes	
E11-F019	1	C	4" Check	A-1	H-16329	Head Spray	C	Note 2	NA	No	
E11-F021A	2	B	16" MO Gate	B-11	H-16330	Containment Spray	C	Qtr	NA	Yes	
E11-F021B	2	B	16" MO Gate	B-2	H-16329	Containment Spray	C	Qtr	NA	Yes	
E11-F022	1	A	4" MO Gate	A-1	H-16329	Head Spray	C	Note 1	CIV	No	

SYSTEM: Residual Heat Removal

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E11-F023	1	A	4" MO Globe	A-2	H-16329	Head Spray Outbrd. Iso	C	Note 1	CIV	No	
E11-F024A	2	B	16" MO Globe	C-7	H-16330	Suppression Pool Cooling	C	Qtr	NA	Yes	
E11-F024B	2	B	16" MO Globe	C-6	H-16329	Suppression Pool Cooling	C	Qtr	NA	Yes	
E11-F025A	1	AC	1" Relief	B-8	H-16330	LPCI Inj. Cont. Iso	C	Note 3	CIV	No	
E11-F025B	2	AC	1" Relief	C-5	H-16329	LPCI Inj. Cont. Iso	C	Note 3	CIV	No	
E11-F026A	2	A	4" MO Gate	D-3	H-16330	Cond. Disch. to RCIC Cont. Iso	C	Qtr	CIV	Yes	
E11-F026B	2	A	4" MO Gate	D-11	H-16329	Cond. Disch. to RCIC Cont. Iso	C	Qtr	CIV	Yes	
E11-F027A	2	B	6" MO Gate	D-3	H-16330	Suppression Pool Spray	C	Qtr	NA	Yes	
E11-F027B	2	B	6" MO Gate	D-11	H-16329	Suppression Pool Spray	C	Qtr	NA	Yes	
E11-F028A	2	A	16" MO Gate	B-8	H-16330	Suppression Pool Spray Outbrd. Iso	C	Qtr	CIV	Yes	
E11-F028B	2	A	16" MO Gate	B-5	H-16329	Suppression Pool Spray Outbrd. Iso	C	Qtr	CIV	Yes	
E11-F029	2	AC	1" Relief	E-2	H-16329	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E11-F030A	2	AC	1" Relief	F-9	H-16330	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	
E11-F030B	2	AC	1" Relief	F-4	H-16329	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	
E11-F030C	2	AC	1" Relief	F-11	H-16330	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	
E11-F030D	2	AC	1" Relief	F-1	H-16329	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	
E11-F031A	2	C	20" Check	H-6	H-16330	RHR Pump Discharge	C	Note 5	NA	No	
E11-F031B	2	C	20" Check	H-6	H-16329	RHR Pump Discharge	C	Note 5	NA	No	
E11-F031C	2	C	20" Check	H-10	H-16330	RHR Pump Discharge	C	Note 5	NA	No	
E11-F031D	2	C	20" Check	H-2	H-16329	RHR Pump Discharge	C	Note 5	NA	No	
E11-F046A	2	C	3" Check	H-7	H-16330	RHR Minimum Flow Line	C	Note 5	NA	No	
E11-F046B	2	C	3" Check	H-5	H-16329	RHR Minimum Flow Line	C	Note 5	NA	No	
E11-F046C	2	C	3" Check	H-11	H-16330	RHR Minimum Flow Line	C	Note 5	NA	No	
E11-F046D	2	C	3" Check	H-2	H-16329	RHR Minimum Flow Line	C	Note 5	NA	No	
E11-F047A	2	B	16" MO Gate	E-6	H-16330	RHR Hx Shell Side Side Inlet	O	Qtr	NA	Yes	
E11-F047B	2	B	16" MO Gate	E-7	H-16329	RHR Hx Shell Side Side Inlet	O	Qtr	NA	Yes	
E11-F048A	2	B	24" MO Globe	B-8	H-16330	RHR Hx Shell Side Bypass	O	Qtr	NA	Yes	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E11-F048B	2	B	24" MO Globe	B-5	H-16329	RHR Hx Shell Side Bypass	O	Qtr	NA	Yes	
E11-F050A	1	AC	24" AO Check	D-6	H-16330	LPCI Injec. Iso	C	See 6.1.7	PIV	No	6.1.7
E11-F050B	1	AC	24" AO Check	D-7	H-16329	LPCI Injec. Iso	C	See 6.1.7	PIV	No	6.1.7
E11-F055A	2	AC	4" Relief	D-6	H-16330	RHR Hx Shell Relief Cont. Iso	C	Note 3	CIV	No	
E11-F055B	2	AC	4" Relief	D-7	H-16329	RHR Hx Shell Relief Cont. Iso	C	Note 3	CIV	No	
E11-F065A	2	B	24" AO Bfly	E-10	H-16330	RHR Torus Suction	O	Qtr	NA	Yes	
E11-F065B	2	B	24" AO Bfly	E-2	H-16329	RHR Torus Suction	O	Qtr	NA	Yes	
E11-F065C	2	B	24" AO Bfly	E-10	H-16330	RHR Torus Suction	O	Qtr	NA	Yes	
E11-F065D	2	B	24" AO Bfly	E-2	H-16329	RHR Torus Suction	O	Qtr	NA	Yes	
E11-F078A	2	C	10" Check	H-6	H-16330	RHR Hx Ser Wtr Tie	C	RO	NA	No	6.1.8
E11-F078B	2	C	10" Check	D-9	H-16329	RHR Hx Ser Wtr Tie	C	RO	NA	No	6.1.8
E11-F091A	2	B	6" MO Globe	E-2	H-16330	Steam Line to RHR Hx Shutdwn	C	Qtr	NA	Yes	
E11-F091B	2	B	6" MO Globe	E-11	H-16329	Steam Line to RHR Hx Shutdwn	C	Qtr	NA	Yes	
E11-F097	2	AC	3" Relief	D-11	H-16329	Steam Line Relief Cont. Iso	C	Note 3	CIV	No	
E11-F103A	2	A	1" MO Globe	E-5	H-16330	RHR Hx Vent Cont Iso	C	Qtr	CIV	Yes	

SYSTEM: Residual Heat Removal

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E11-F103B	2	A	1" MO Globe	E-8	H-16329	RHR Hx Vent Cont Iso	C	Qtr	CIV	Yes	
E11-F140A	2	B	6" MO Gate	E-2	H-16330	Steam Line to RHR Hx Shutdown	C	Qtr	NA	Yes	
E11-F140B	2	B	6" MO Gate	E-11	H-16329	Steam Line to RHR Hx Shutdown	C	Qtr	NA	Yes	
E11-F068A	3	B	10" MO Ball	H-6	H-16330	RHR Hx Ser. Wtr Disch.	C	Note 6	NA	No	
E11-F068B	3	B	10" MO Ball	H-7	H-16329	RHR Hx Ser. Wtr Disch.	C	Note 6	NA	No	
E11-F073A	2	B	10" MO Gate	G-4	H-16330	RHR Ser. Wtr Intertie	C	Qtr	NA	Yes	
E11-F073B	2	B	10" MO Gate	G-9	H-16329	RHR Ser. Wtr Intertie	C	Qtr	NA	Yes	
E11-F075A	2	B	10" MO Gate	G-4	H-16330	RHR Ser. Wtr Intertie	C	Qtr	NA	Yes	
E11-F075B	2	B	10" MO Gate	G-9	H-16329	RHR Ser. Wtr Intertie	C	Qtr	NA	Yes	
E11-F119A	3	B	18" MO Gate	H-4	H-16330	RHR Ser. Wtr Train A & B Cross	C	Qtr	NA	Yes	
E11-F119B	3	B	18" MO Gate	H-9	H-16329	RHR Ser. Wtr Train A & B Cross	C	Qtr	NA	Yes	
E11-F200A	3	B	2" AO PCV	-	D-11004	RHR Ser. Wtr. Pump Flow	C	Note 9	NA	No	
E11-F200B	3	B	2" AO PCV	-	D-11004	RHR Ser. Wtr. Pump Flow	C	Note 9	NA	No	
E11-F200C	3	B	2" AO PCV	-	D-11004	RHR Ser. Wtr. Pump Flow	C	Note 9	NA	No	

SYSTEM: Residual Heat Removal

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E11-F200D	3	B	2" AO PCV	-	D-11004	RHR Ser. Wtr. Pump Flow	C	Note 9	NA	No	
E11-L001A	3	B	1/2" Solenoid	-	D-11004	RHR Ser. Wtr Pump Cooling	C	Note 7	NA	No	
E11-L001B	3	B	1/2" Solenoid	-	D-11004	RHR Ser. Wtr Pump Cooling	C	Note 7	NA	No	
E11-L001C	3	B	1/2" Solenoid	-	D-11004	RHR Ser. Wtr Pump Cooling	C	Note 7	NA	No	
E11-L001D	3	B	1/2" Solenoid	-	D-11004	RHR Ser. Wtr Pump Cooling	C	Note 7	NA	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E21-F001A	2	A	20" MO Gate	H-8	H-16331	CS Pump Suction Out	O	Qtr	CIV	Yes	
E21-F001B	2	A	20" MO Gate	J-8	H-16331	CS Pump Suction Out	O	Qtr	CIV	Yes	
E21-F003A	2	C	12" Check	F-9	H-16331	CS Pump Discharge	C	Note 5	NA	No	
E21-F003B	2	C	12" Check	F-11	H-16331	CS Pump Discharge	C	Note 5	NA	No	
E21-F004A	1	B	10" MO Gate	E-7	H-16331	CS Outbrd. Injection	O	Qtr	NA	Yes	
E21-F004B	1	B	10" MO Gate	B-7	H-16331	CS Outbrd. Injection	O	Qtr	NA	Yes	
E21-F005A	1	A	10" MO Gate	E-6	H-16331	CS Outbrd. Cont. Iso	C	Qtr	PIV	Yes	
E21-F005B	1	A	10" MO Gate	B-6	H-16331	CS Outbrd. Cont. Iso	C	Qtr	PIV	Yes	
E21-F006A	1	AC	10" AO Check	D-4	H-16331	CS Pressure Iso	C	See 6.1.7	PIV	No	6.1.7
E21-F006B	1	AC	10" AO Check	C-4	H-16331	CS Pressure Iso	C	See 6.1.7	PIV	No	6.1.7
E21-F012A	2	C	2" Relief	D-9	H-16331	CS Pump Disch. Relief	C	Note 3	NA	No	
E21-F012B	2	C	2" Relief	B-9	H-16331	CS Pump Disch. Relief	C	Note 3	NA	No	
E21-F015A	2	A	10" MO Globe	D-8	H-16331	Core Spray Test Bypass Cont. Iso	C	Qtr	CIV	Yes	
E21-F015B	2	A	10" MO Globe	C-8	H-16331	Core Spray Test Bypass Cont. Iso	C	Qtr	CIV	Yes	
E21-F019A	2	B	20" AO Bfly	J-6	H-16331	Core Spray Pump Torus Suc.	O	Qtr	NA	Yes	
E21-F019B	2	B	20" AO Bfly	K-6	H-16331	Core Spray Pump Torus Suc.	O	Qtr	NA	Yes	

SYSTEM: Core Spray System

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E21-F031A	2	B	3" MO Gate	F-9	H-16331	CS Pump Min. Flow	O	Qtr	NA	Yes	
E21-F031B	2	B	3" MC Gate	F-10	H-16331	CS Pump Min. Flow	O	Qtr	NA	Yes	
E21-F036A	2	AC	3" Check	E-9	H-16331	CS Test Line Cont. Iso	C	See 6.1.6	CIV	No	6.1.6
E21-F036B	2	AC	3" Check	E-10	H-16331	CS Test Line Cont. Iso	C	See 6.1.6	CIV	No	6.1.6

SYSTEM: High Pressure Coolant Injection

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E41-F001	2	B	10" MO Gate	E-12	H-16332	HPCI Steam Supply Shutoff	C	Qtr	NA	Yes	
E41-F002	1	A	10" MO Gate	C-2	H-16332	HPCI Steam Supply Inbrd. Iso	O	Qtr	CIV	Yes	6.1.2
E41-F003	1	A	10" MO Gate	C-4	H-16332	HPCI Steam Supply Outbrd. Iso	O	Qtr	CIV	Yes	
E41-F004	2	B	16" MO Gate	D-9	H-16332	HPCI Pump Suc. from Cond. Stg.	O	Qtr	NA	Yes	
E41-F005	2	C	14" Check	F-6	H-16332	HPCI Pump Disch.	C	Note 5	NA	No	
E41-F006	2	A	14" MO Gate	E-5	H-16332	HPCI Pump Inbrd. Disch. Iso	C	See 6.1.10	PIV	Yes	6.1.10
E41-F007	2	B	14" MO Gate	E-6	H-16332	HPCI Pump Outbrd. Disch.	O	See 6.1.10	NA	Yes	6.1.10
E41-F008	2	A	10" MO Globe	D-7	H-16332	HPCI Pump Test Bypass Iso.	C	Note 1	CIV	No	
E41-F011	2	B	10" MO Gate	C-7	H-16332	HPCI Pump Redun. Shutoff to Cond. Stg.	C	Note 14	NA	No	
E41-F012	2	A	4" MO Gate	F-7	H-16332	HPCI Pump Min. Flow Inbrd. Iso	C	Qtr	CIV	Yes	6.1.2
E41-F019	2	C	16" Check	D-9	H-16332	HPCI Pump Suc. from Cond. Stg.	C	Note 5	NA	No	
E41-F021	2	AC	12" Stop Check	G-3	H-16332	HPCI Turb. Exh. Inbrd. Iso	C	See 6.1.12	CIV	No	6.1.11 6.1.12

SYSTEM: High Pressure Coolant Injection

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E41-F022	2	AC	2" Stop Check	G-4	H-16332	HPCI Turb. Exh. Drn. Torus Iso	C	See 6.1.12	CIV	No	6.1.11 6.1.12
E41-F025	2	B	1" AO Globe	J-8	H-16333	Bar Cond. Cooling	C	Qtr	NA	Yes	
E41-F026	2	B	1" AO Globe	J-8	H-16333	Bar Cond. Cooling	C	Qtr	NA	Yes	
E41-F035	2	B	2" AO PCV	G-8	H-16333	HPCI Turb. Lube Oil Cooling	C	Note 10	NA	No	
E41-F040	2	AC	2" Check	G-5	H-16332	HPCI Turb. Exh. Drn. Torus Iso	C	See 6.1.12	CIV	No	6.1.12
E41-F041	2	B	16" MO Gate	D-8	H-16332	HPCI Pump Suc. Shutoff	C	Qtr	NA	Yes	
E41-F042	2	A	16" MO Gate	J-5	H-16332	HPCI Pump Suc. Torus Outbrd. Iso	C	Qtr	CIV	Yes	
E41-F045	2	C	16" Check	J-7	H-16332	HPCI Pump Suction	C	See 6.1.13	NA	No	6.1.13
E41-F046	2	AC	4" Check	F-8	H-16332	HPCI Pump Min Flow Outbrd. Iso	C	Note 5	CIV	No	
E41-F049	2	AC	20" Check	G-4	H-16332	HPCI Turb. Exh. Outbrd. Iso	C	See 6.1.12	CIV	No	6.1.12
E41-F051	2	A	16" AO Bfly	J-4	H-16332	HPCI Pump Suc. Torus Inbrd. Iso	O	Qtr	CIV	Yes	
E41-F059	2	B	2" MO Globe	F-8	H-16333	HPCI Turb. Lube Oil Cooling	C	Qtr	NA	Yes	
E41-F104	2	A	2" MO Gate	G-3	H-16332	HPCI Vac. Relief Outbrd. Torus Iso	O	Qtr	CIV	Yes	
E41-F111	2	A	2" MO Gate	G-2	H-16332	HPCI Vac. Relief Inbrd. Torus Iso	O	Qtr	CIV	Yes	

SYSTEM: Reactor Coolant Isolation Cooling

Plant Hatch - Unit 1 Valve Test Program

Sh. 17 of 34

Valve No.	Code Class	Cat.	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
E51-F001	2	AC	10" Stop Check	G-5	H-16334	RCIC Turb. Exh. to Torus Iso	C	See 6.1.12	CIV	No	6.1.11 6.1.12
E51-F002	2	AC	2" Stop Check	G-6	H-16334	RCIC Vac Pump Disch. to Torus Iso	C	See 6.1.12	CIV	No	6.1.11 6.1.12
E51-F003	2	A	6" MO Bfly	J-6	H-16334	RCIC Pump Suction Torus Iso	O	Qtr	CIV	Yes	6.1.2
E51-F007	1	A	4" MO Gate	C-5	H-16334	RCIC Steam Supply Inbrd. Iso	O	Qtr	CIV	Yes	6.1.2
E51-F008	1	A	4" MO Gate	C-6	H-16334	RCIC Steam Supply Outbrd Iso	O	Qtr	CIV	Yes	
E51-F013	2	A	4" MO Gate	E-6	H-16334	RCIC Feedwater Inj.	C	Qtr	PIV	Yes	
E51-F019	2	A	2" MO Globe	F-7	H-16334	RCIC Pump Min. Flow Torus Iso	C	Note 8	CIV	No	6.1.2
E51-F021	2	AC	2" Check	F-8	H-16334	RCIC Pump Min. Flow Torus Iso	C	Note 5	CIV	No	
E51-F028	2	AC	2" Check	G-7	H-16334	RCIC Vac. Pump Disch. Torus Iso	C	See 6.1.12	CIV	No	6.1.12
E51-F031	2	A	6" MO Gate	J-6	H-16334	RCIC Pump Suction Torus Iso	O	Qtr	CIV	Yes	
E51-F040	2	AC	10" Check	G-5	H-16334	RCIC Turb. Exh. Torus Iso	C	See 6.1.12	CIV	Yes	6.1.12
E51-F104	2	A	1-1/2" MO Gate	G-5	H-16334	RCIC Vac. Brker Torus Iso	O	Qtr	CIV	Yes	6.1.2
E51-F105	2	A	1-1/2" MO Gate	G-5	H-16334	RCIC Vac. Brker Torus Iso	O	Note 10	CIV	Yes	

SYSTEM: Radwaste

Plant Hatch - Unit 1 Valve Test Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
G11-F003	2	A	3" AO Gate	B-3	H-16176	DW Flr. Drns. Cont. Iso	0	Qtr	CIV	Yes	
G11-F004	2	A	3" AO Gate	B-3	H-16176	DW Flr. Drns. Cont. Iso	0	Qtr	CIV	Yes	
G11-F019	2	A	3" AO Gate	E-3	H-16176	DW Equip. Drns. Cont. Iso	0	Qtr	CIV	Yes	
G11-F020	2	A	3" AO Gate	E-4	H-16176	DW Equip. Drns. Cont. Iso	0	Qtr	CIV	Yes	

SYSTEM: Reactor Water Cleanup

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
G31-F001	1	A	6" MO Gate	B-2	H-15188	RWCU Pump Suc. Inbrd. Iso	0	Qtr	CIV	Yes	
G31-F004	1	A	6" MO Gate	B-3	H-16188	RWCU Pump Suc. Outbrd. Iso	0	Qtr	CIV	Yes	
G31-F039	1	A	4" Check	A-5	H-16188	RWCU Disch. Iso	0	RO	CIV	No	6.1.1

SYSTEM: Fuel Pool Cooling & Cleanup System

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
G41-F001A	3	B	8" Man. Bfly	D-9	H-16002	FPCCU Disch. from Skimmer Surge Tank	0	Qtr	NA	No	
G41-F001B	3	B	8" Man. Bfly	D-9	H-16002	FPCCU Disch. from Skimmer Surge Tank	0	Qtr	NA	No	
G41-F002A	3	B	6" Man. Bfly	F-2	H-16002	FPCCU Pump Suction	0	Qtr	NA	No	
G41-F002B	3	B	6" Man. Bfly	H-2	H-16002	FPCCU Pump Suction	0	Qtr	NA	No	
G41-F019A	3	B	6" Man. Gate	D-9	H-16002	FPCCU Inlet from RHR	C	Qtr	NA	No	
G41-F019B	3	B	6" Man. Gate	D-9	H-16002	FPCCU Inlet from RHR	C	Qtr	NA	No	
G41-F020A	3	B	6" Man. Gate	D-11	H-16002	FPCCU Return from RHR	C	Qtr	NA	No	
G41-F020B	3	B	6" Man. Gate	D-11	H-16002	FPCCU Return from RHR	C	Qtr	NA	No	

SYSTEM: Demineralized Water

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
P21-F353	2	AE	2" Manual Gate	F-7	H-16015	Demin. Water Cont. Iso	LC	Note 1	CIV	No	
P21-F406	2	AE	2" Manual Gate	F-8	H-16015	Demin. Water	LC	Note 1	CIV	No	

SYSTEM: H₂ and O₂ Analyzer

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
P33-F002	2	A	1" AO Control	B-4	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F003	2	A	1" AO Control	D-4	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F004	2	A	1" AO Control	E-4	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F006	2	A	1" AO Control	G-4	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F007	2	A	1" AO Control	H-4	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F010	2	A	1" AO Control	B-5	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F011	2	A	1" AO Control	D-5	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F012	2	A	1" AO Control	E-5	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F014	2	A	1" AO Control	G-5	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
P33-F015	2	A	1" AO Control	H-5	H-16276	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	

SYSTEM: Plant Service Water

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
P41-F023A	3	C	2" Check	A-10	H-16011	CRD Pump Room Cooler	O	Note 11	NA	No	
P41-F023B	3	C	2" Check	B-10	H-16011	CRD Pump Room Cooler	O	Note 11	NA	No	
P41-F024A	3	C	1-1/2" Check	B-8	H-16011	HPCI Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
P41-F024B	3	C	1-1/2" Check	C-8	H-16011	HPCI Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
P41-F025A	3	C	3" Check	D-8	H-16011	RHR & CS Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
P41-F025B	3	C	3" Check	D-8	H-16011	RHR & CS Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
P41-F026A	3	C	3" Check	G-7	H-16011	RHR Pump Cooler	C	See 6.1.14	NA	No	6.1.14
P41-F026B	3	C	3" Check	G-7	H-16011	RHR Pump Cooler	C	See 6.1.14	NA	No	6.1.14
P41-F028A	3	C	1-1/2" Check	G-2	H-16011	RCIC Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
P41-F028B	3	C	1-1/2" Check	G-3	H-16011	RCIC Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
P41-F035A	3	B	2" AO Globe	B-9	H-16011	HPCI Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
P41-F035B	3	B	2" AO Globe	C-9	H-16011	HPCI Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
P41-F036A	3	B	3" AO Globe	D-9	H-16011	RHR & CS Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
P41-F036B	3	B	3" AO Globe	D-9	H-16011	RHR & CS Pump Room Cooler	C	Qtr	NA	Yes	6.1.15

SYSTEM: Plant Service Water

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
P41-F037A	3	B	1-1/2" AO Globe	H-8	H-16011	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
P41-F037B	3	B	1-1/2" AO Globe	E-9	H-16011	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
P41-F037C	3	B	1-1/2" AO Globe	J-8	H-16011	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
P41-F037D	3	B	1-1/2" AO Globe	E-9	H-16011	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
P41-F039A	3	B	3" AO Globe	G-8	H-16011	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
P41-F039B	3	B	3" AO Globe	G-8	H-16011	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
P41-F040A	3	B	2" AO Globe	H-2	H-16011	RCIC Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
P41-F040B	3	B	2" AO Globe	H-3	H-16011	RCIC Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
P41-F042A	3	B	3" AO Globe	A-10	H-16011	CRD Pump Room Cooler	O	Qtr	NA	Yes	6.1.15
P41-F042B	3	B	3" AO Globe	B-10	H-16011	CRD Pump Room Cooler	O	Qtr	NA	Yes	6.1.15
P41-F049	2	A	8" MO Gate	F-6	H-16011	Drywell Air Cooler Iso	O	CS	CIV	Yes	6.1.16
P41-F050	2	A	8" MO Gate	D-2	H-16011	Drywell Air Cooler Iso	O	CS	CIV	Yes	6.1.16
P41-F064	3	C	6" Check	F-10	H-16011	Division I supply	O	Note 11	NA	No	
P41-F065	3	C	8" Check	G-10	H-16011	Division II supply	O	Note 11	NA	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
P41-F208A	3	B	3" AO PCV	-	D-11001	S.W. Press Regulator	0	Note 9	NA	No	
P41-F208B	3	B	3" AO PCV	-	D-11001	S.W. Press Regulator	0	Note 9	NA	No	
P41-F208C	3	B	3" AO PCV	-	D-11001	S.W. Press Regulator	0	Note 9	NA	No	
P41-F208D	3	B	3" AO PCV	-	D-11001	S.W. Press Regulator	0	Note 9	NA	No	
P41-F310A	3	B	30" MO Bfly	-	D-11001	Turb. Bldg. Supply Shutoff	0	CS	NA	Yes	6.1.17
P41-F310B	3	B	30" MO Bfly	-	D-11001	Turb. Bldg. Supply Shutoff	0	CS	NA	Yes	6.1.17
P41-F310C	3	B	30" MO Bfly	-	D-11001	Turb. Bldg. Supply Shutoff	0	CS	NA	Yes	6.1.17
P41-F310D	3	B	30" MO Bfly	-	D-11001	Turb. Bldg. Supply Shutoff	0	CS	NA	Yes	6.1.17
P41-F311A	3	B	18" Check	-	D-11001	Pump Discharge	0	Note 11	NA	No	
P41-F311B	3	B	18" Check	-	D-11001	Pump Discharge	0	Note 11	NA	No	
P41-F311C	3	B	18" Check	-	D-11001	Pump Discharge	0	Note 11	NA	No	
P41-F311D	3	B	18" Check	-	D-11001	Pump Discharge	0	Note 11	NA	No	
P41-L003A	3	B	1" Solenoid	-	D-11001	S.W. Pump Cooling Shutoff	0	Note 7	NA	No	
P41-L003B	3	B	1" Solenoid	-	D-11001	S.W. Pump Cooling Shutoff	0	Note 7	NA	No	
P41-L003C	3	B	1" Solenoid	-	D-11001	S.W. Pump Cooling Shutoff	0	Note 7	NA	No	
P41-L003D	3	B	1" Solenoid	-	D-11001	S.W. Pump Cooling Shutoff	0	Note 7	NA	No	

SYSTEM: RB Closed Cooling Water

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
P42-F051	2	A	4" MO Gate	B-9	H-16009	RBCCW to Recir. Cont. Iso	0	CS	CIV	Yes	6.1.18
P42-F052	2	A	4" MO Gate	E-9	H-16009	RBCCW to Recir. Cont. Iso	0	CS	CIV	Yes	6.1.18

SYSTEM: Service Air

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
P51-F513	2	AE	2" Man. Globe	F-3	H-16013	Ser. Air Cont. Iso	LC	Note 1	CIV	No	
P51-F514	2	AE	2" Man. Globe	F-3	H-16013	Ser. Air Cont. Iso	LC	Note 1	CIV	No	

SYSTEM: Drywell Pneumatic

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
P70-F002	2	A	1" AO Control	F-8	H-16286	DW Pneumatic Cont. Iso	0	Qtr	CIV	Yes	
P70-F003	2	A	1" AO Control	F-8	H-15286	DW Pneumatic Cont. Iso	0	Qtr	CIV	Yes	
P70-F004	2	A	2" AO Control	C-8	H-16286	DW Pneumatic Cont. Iso	0	Qtr	CIV	Yes	
P70-F005	2	A	2" AO Control	D-8	H-16286	DW Pneumatic Cont. Iso	0	Qtr	CIV	Yes	
P70-F020	2	AC	2" Check	C-7	H-16286	DW Pneumatic Cont. Iso	0	RO	CIV	No	6.1.1

SYSTEM: Standby Gas Treatment

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
T46-F001A	3	B	18" AO Bfly	C-1	H-16020	Filter Bed Inlet from Reactor Bldg.	C	Qtr	NA	Yes	
T46-F001B	3	B	18" AO Bfly	G-1	H-16020	Filter Bed Inlet from Reactor Bldg.	C	Qtr	NA	Yes	

SYSTEM: Containment Purge and Inerting

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
T48-F103	2	A	6" AO Bfly	F-2	H-16000	DW & Torus Supply Iso	C	Qtr	CIV	Yes	
T48-F104	2	A	1" AO Control	G-4	H-15000	Dwg & Torus Outbrd. Iso	C	Qtr	CIV	Yes	
T48-F113	2	A	2" AO Control	F-7	H-16000	DW Inerting Outbrd Iso	C	Qtr	CIV	Yes	
T48-F114	2	A	2" AO Control	F-8	H-16000	DW Inerting Inbrd Iso	C	Qtr	CIV	Yes	
T48-F115	2	A	2" AO Control	G-7	H-16000	DW Inerting Outbrd Iso	C	Qtr	CIV	Yes	
T48-F116	2	A	2" AO Control	G-8	H-16000	DW Inerting Outbrd Iso	C	Qtr	CIV	Yes	
T48-F118A	2	A	1" Solenoid	G-5	H-16000	Torus Makeup Inbrd Iso	O	Qtr	CIV	Yes	
T48-F118B	2	A	1" Solenoid	G-5	H-16000	Torus Makeup Inbrd Iso	O	Qtr	CIV	Yes	
T48-F321	2	A	2" AO Control	J-7	H-16000	DW Inerting Outbrd. Iso	C	Qtr	CIV	Yes	
T48-F322	2	A	2" AO Control	J-8	H-16000	DW Inerting Inbrd. Iso	C	Qtr	CIV	Yes	
T48-F325	2	A	2" AO Control	H-7	H-16000	Torus Inerting Outbrd. Iso	C	Qtr	CIV	Yes	
T48-F327	2	A	2" AO Control	H-8	H-16000	Torus Inerting Inbrd. Iso	C	Qtr	CIV	Yes	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
T48-F307	2	A	18" AO Bfly	C-9	H-16024	DW Purge Inlet Inbrd Iso	C	Note 1	CIV	No	
T48-F308	2	A	18" AO Bfly	C-10	H-16024	DW Purge Inlet Inbrd Iso	C	Note 1	CIV	No	
T48-F309	2	A	18" AO Bfly	E-10	H-16024	Torus Purge Inlet Inbrd Iso	C	Note 1	CIV	No	
T48-F310	2	A	20" AO Bfly	F-10	H-16024	Torus Purge Vac. Brker Iso	C	Qtr	CIV	Yes	
T48-F311	2	A	20" AO Bfly	F-9	H-16024	Torus Purge Vac. Brker Iso	C	Qtr	CIV	Yes	
T48-F318	2	A	18" AO Bfly	G-4	H-16024	Torus Purge Outlet Inbrd Iso	O	Qtr	CIV	Yes	
T48-F319	2	A	18" AO Bfly	D-4	H-16024	DW Purge Outlet Inbrd Iso	C	Note 1	CIV	No	
T48-F320	2	A	18" AO Bfly	D-3	H-16024	DW Purge Outlet Outbrd Iso	C	Note 1	CIV	No	
T48-F323A	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323B	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323C	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323D	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323E	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
T48-F323F	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	HA	No	
T48-F323G	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323H	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323I	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323J	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323K	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F323L	2	C	18" AO Check	H-8	H-16024	DW to Torus Vac. Breaker	C	Qtr	NA	No	
T48-F324	2	A	18" AO Bfly	D-10	H-16024	Torus Purge Inlet Outbrd. Iso	C	Note 1	CIV	No	
T48-F326	2	A	18" AO Bfly	G-3	H-16024	Torus Purge Outlet Outbrd. Iso	O	Qtr	CIV	Yes	
T48-F328A	2	AC	20" AO Check	G-10	H-16024	Reactor Bldg. to Suppression Cham Vac. Brker	C	Qtr	CIV	No	
T48-F328B	2	AC	20" AO Check	G-9	H-16024	Reactor Bldg. to Suppression Cham Vac. Brker	C	Qtr	CIV	No	

SYSTEM: Containment Purge and Inerting

Plant Hatch - Unit 1 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
T48-F332A	2	A	2" AO Control	E-3	H-16024	Torus Purge Outlet Outbrd Iso	C	Qtr	CIV	Yes	
T48-F332B	2	A	2" AO Control	F-3	H-16024	Torus Purge Outlet Outbrd Iso	C	Qtr	CIV	Yes	
T48-F333A	2	A	2" AO Control	E-4	H-16024	Torus Purge Outlet Inbrd Iso	C	Qtr	CIV	Yes	
T48-F333B	2	A	2" AO Control	F-4	H-16024	Torus Purge Outlet Inbrd Iso	C	Qtr	CIV	Yes	
T48-F334A	2	A	2" AO Control	B-3	H-16024	DW Purge Outlet Outbrd Iso	C	Qtr	CIV	Yes	
T48-F334B	2	A	2" AO Control	C-3	H-16024	DW Purge Outlet Outbrd Iso	C	Qtr	CIV	Yes	
T48-F335A	2	A	2" AO Control	B-4	H-16024	DW Purge Outlet Inbrd Iso	C	Qtr	CIV	Yes	
T48-F335B	2	A	2" AO Control	C-4	H-16024	DW Purge Outlet Inbrd Iso	C	Qtr	CIV	Yes	
T48-F338	2	A	2" Solenoid	H-2	H-16024	Bypass-Outbrd Iso	C	Qtr	CIV	Yes	
T48-F339	2	A	2" Solenoid	H-3	H-16024	Bypass-Inbrd Iso	C	Qtr	CIV	Yes	
T48-F340	2	A	2" Solenoid	D-4	H-16024	Bypass-Outbrd Iso	C	Qtr	CIV	Yes	
T48-F341	2	A	2" Solenoid	D-4	H-16024	Bypass-Inbrd Iso	C	Qtr	CIV	Yes	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
T48-F342A	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342B	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342C	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342D	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342E	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342F	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342G	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342H	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342I	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342J	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342K	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
T48-F342L	2	A	1/2" Solenoid	H-8	H-16024	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2B21-F010A	1	AC	18" Check	E-3	H-26000	FW Inbrd.Cont.Iso.	0	RO	CIV	No	6.1.1
2B21-F010B	1	AC	18" Check	F-3	H-26000	FW Inbrd.Cont.Iso.	0	RO	CIV	No	6.1.1
2B21-F013A	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013B	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013C	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013D	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013E	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013F	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013G	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013H	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013K	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013L	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F013M	1	C	6" Relief	D-6	H-26000	Main Steam Relief	-	Note 3	NA	No	
2B21-F016	1	A	3" MO Gate	E-8	H-26000	Main Steam Line DRN. Inb. Iso.	C	Note 1	CIV	No	6.1.2
2B21-F019	1	A	3" MO Gate	E-9	H-26000	Main Steam Line DRN. Inb. Iso.	C	Note 1	CIV	No	
2B21-F022A	1	A	24" AO Globe	D-8	H-26000	MSIV	0	Qtr.	CIV	Yes	
2B21-F022B	1	A	24" AO Globe	D-8	H-26000	MSIV	0	Qtr.	CIV	Yes	
2B21-F022C	1	A	24" AO Globe	D-8	H-26000	MSIV	0	Qtr.	CIV	Yes	

SYSTEM: Main Steam & Feedwater

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2B21-F022D	1	A	24" AO Globe	D-8	H-26000	MSIV	0	Qtr.	CIV	Yes	
2B21-F028A	1	A	24" AO Globe	D-9	H-26000	MSIV	0	Qtr.	CIV	Yes	
2B21-F028B	1	A	24" AO Globe	D-9	H-26000	MSIV	0	Qtr.	CIV	Yes	
2B21-F028C	1	A	24" AO Globe	D-9	H-26000	MSIV	0	Qtr.	CIV	Yes	
2B21-F028D	1	A	24" AO Globe	D-9	H-26000	MSIV	0	Qtr.	CIV	Yes	
2B21-F037A	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037B	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037C	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037D	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037E	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037F	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037G	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2B21-F037H	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037K	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037L	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F037M	3	C	6" Check	E-7	H-26000	Vac. Breaker MSRV Disch.	C	See 6.1.3	NA	No	6.1.3
2B21-F076A	2	C	18" AO check	E-2	H-26000	FW Check	O	Note 13	NA	No	
2B21-F076B	2	C	18" AO check	F-2	H-26000	FW Check	O	Note 13	NA	No	
2B21-F077A	1	AC	18" AO check	E-3	H-26000	FW Outbrd Iso	O	Note 13	CIV	No	
2B21-F077B	1	AC	18" AO check	E-3	H-26000	FW Outbrd Iso	O	Note 13	CIV	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2B31-F013A	1	AC	3/4" Check	G-3	H-26003	Recir. Pump Seal Wtr	0	RO	CIV	No	6.1.1
2B31-F013B	1	AC	3/4" Check	G-3	H-26003	Recir. Pump Seal Wtr	0	RO	CIV	No	6.1.1
2B31-F017A	1	AC	3/4" Check	G-2	H-26003	Recir. Pump Seal Wtr	0	RO	CIV	No	6.1.1
2B31-F017B	1	AC	3/4" Check	G-2	H-26003	Recir. Pump Seal Wtr	0	RO	CIV	No	6.1.1
2B31-F019	1	A	1" AO Globe	E-4	H-26003	Reac. Sample Sys. Inbrd. Iso	0	Qtr	CIV	Yes	
2B31-F020	1	A	1" AO Globe	E-2	H-26003	Reac. Sample Sys. Inbrd. Iso	0	Qtr	CIV	Yes	
2B31-F031A	1	B	28" MO Gate	G-7	H-26003	Reactor Recirculation	0	CS	NA	Yes	6.1.4
2B31-F031B	1	B	28" MO Gate	G-7	H-26003	Reactor Recirculation	0	CS	NA	Yes	6.1.4

SYSTEM: Standby Liquid Control

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2C41-F004A	2	D	1-1/2" Expl	E-2	H-26009	SLC Explo Act	C	Note 4	NA	No	
2C41-F004B	2	D	1-1/2" Expl	F-2	H-26009	SLC Explo Act	C	Note 4	NA	No	
2C41-F006	1	AC	1-1/2" Check	E-2	H-26009	SLC Outbrd Cont. Iso	C	18 mos.	CIV	No	6.1.5
2C41-F007	1	AC	1-1/2" Check	F-1	H-26009	SLC Outbrd Cont. Iso	C	18 mos.	CIV	No	
2C41-F029A	2	C	1" Relief	E-5	H-26009	SLC Pump Disch. Relief	C	Note 3	NA	No	
2C41-F029B	2	C	1" Relief	H-5	H-26009	SLC Pump Disch. Relief	C	Note 3	NA	No	
2C41-F033A	2	C	1-1/2" Check	F-4	H-26009	SLC Pump Disch.	C	Qtr.	NA	No	
2C41-F033B	2	C	1-1/2" Check	G-4	H-26009	SLC Pump Disch.	C	Qtr.	NA	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2011-F050	2	A	1" AO Control	D-5	H-26016	Fission Prod. Mon. Cont. Iso	0	Qtr	CIV	Yes	
2011-F051	2	A	1" AO Control	F-5	H-26016	Fission Prod. Mon. Cont. Iso	0	Qtr	CIV	Yes	
2011-F052	2	A	1" AO Control	D-6	H-26016	Fission Prod. Mon. Cont. Iso	0	Qtr	CIV	Yes	
2011-F053	2	A	1" AO Control	F-6	H-26016	Fission Prod. Mon. Cont. Iso	LC	Qtr	CIV	Yes	
2011-F058	2	AE	1" LC Manual	G-3	H-26016	Fission Prod. Mon. Cont. Iso	LC	Note 1	CIV	No	
2011-F061	2	AE	1" LC Manual	F-8	H-26016	Fission Prod. Mon. Cont. Iso	LC	Note 1	CIV	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E11-F003A	2	B	16" MO Gate Vlv	D-4	H-26015	RHR Hx Shell Side Outlet	0	Qtr	NA	Yes	
2E11-F003B	2	B	16" MO Gate Vlv	E-8	H-26014	RHR Hx Shell Side Outlet	0	Qtr	NA	Yes	
2E11-F004A	2	A	24" MO Gate Vlv	E-8	H-26015	RHR Pump Suction Torus Iso	0	Qtr	CIV	Yes	
2E11-F004B	2	A	24" MO Gate Vlv	F-3	H-26014	RHR Pump Suction Torus Iso	0	Qtr	CIV	Yes	
2E11-F004C	2	A	24" MO Gate Vlv	E-9	H-26015	RHR Pump Suction Torus Iso	0	Qtr	CIV	Yes	
2E11-F004D	2	A	24" MO Gate Vlv	F-2	H-26014	RHR Pump Suc Torus Iso	0	Qtr	CIV	Yes	
2E11-F006A	2	B	20" MO Gate Vlv	F-8	H-26015	RHR Shutdown Cooling Sys	C	Qtr	NA	Yes	
2E11-F006B	2	B	20" MO Gate Vlv	F-3	H-26014	RHR Shutdown Cooling Sys	C	Qtr	NA	Yes	
2E11-F006C	2	B	20" MO Gate Vlv	F-10	H-26015	RHR Shutdown Cooling Sys	C	Qtr	NA	Yes	
2E11-F006D	2	B	20" MO Gate Vlv	F-2	H-26014	RHR Shutdown Cooling Sys	C	Qtr	NA	Yes	
2E11-F007A	2	A	4" MO Gate Vlv	D-5	H-26014	RHR Pump Min Flow Torus Iso	0	Qtr	CIV	Yes	6.1.2
2E11-F007B	2	A	4" MO Gate Vlv	D-6	H-26014	RHR Pump Min Flow	0	Qtr	CIV	Yes	6.1.2

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E11-F008	1	A	20" MO Gate Vlv	D-10	H-26015	RHR Shutdown Cooling Outbrd Iso	C	Note 1	PIV	No	
2E11-F009	1	A	20" MO Gate Vlv	D-10	H-26015	RHR Shutdown Cooling Outbrd Iso	C	Note 1	PIV	No	
2E11-F011A	2	A	4" MO Gate	D-3	H-26015	RHR Cond. Disch. to Torus	C	Qtr	CIV	Yes	6.1.2
2E11-F011B	2	A	4" MO Gate	D-8	H-26014	RHR Cond. Disch. to Torus	C	Qtr	CIV	Yes	6.1.2
2E11-F015A	1	A	24" MO Gate	D-7	H-26015	LPCI Outbrd, Cont. Iso	C	Qtr	PIV	Yes	
2E11-F015B	1	A	24" MO Gate	D-4	H-26014	LPCI Outbrd, Cont. Iso	C	Qtr	PIV	Yes	
2E11-F016A	2	A	16" MO Gate	B-7	H-26015	Cont. Spray Outbrd. Iso	C	Qtr	CIV	Yes	
2E11-F016B	2	A	16" MO Gate	B-4	H-26014	Cont. Spray Outbrd. Iso	C	Qtr	CIV	Yes	
2E11-F017A	1	B	24" MO Gate	D-7	H-26015	LPCI	O	Qtr	NA	Yes	
2E11-F017B	1	B	24" MO Gate	D-4	H-26014	LPCI	O	Qtr	NA	Yes	
2E11-F019	1	C	4" Check	B-2	H-26014	Head Spray	C	Note 2	NA	No	
2E11-F021A	2	B	16" MO Gate	B-9	H-26015	Containment Spray	C	Qtr	NA	Yes	
2E11-F021B	2	B	16" MO Gate	C-2	H-26014	Containment Spray	C	Qtr	NA	Yes	
2E11-F022	1	A	4" MO Gate	B-2	H-26014	Head Spray	C	Note 1	CIV	No	

SYSTEM: Residual Heat Removal

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E11-F023	1	A	4" MO Globe	B-3	H-26014	Head Spray Outbrd. Iso	C	Note 1	CIV	No	
2E11-F024A	2	B	16" MO Globe	C-6	H-26015	Suppression Pool Cooling	C	Qtr	NA	Yes	
2E11-F024B	2	B	16" MO Globe	D-5	H-26014	Suppression Pool Cooling	C	Qtr	NA	Yes	
2E11-F025A	2	AC	1" Relief	C-7	H-26015	LPCI Inj. Cont. Iso	C	Note 3	CIV	No	
2E11-F025B	2	AC	1" Relief	C-4	H-26014	LPCI Inj. Cont. Iso	C	Note 3	CIV	No	
2E11-F026A	2	A	4" MO Gate	D-2	H-26015	Cond. Disch. to RCIC Cont. Iso	C	Qtr	CIV	Yes	
2E11-F026B	2	A	4" MO Gate	E-9	H-26014	Cond. Disch. to RCIC Cont. Iso	C	Qtr	CIV	Yes	
2E11-F027A	2	B	6" MO Gate	C-7	H-26015	Suppression Pool Spray	C	Qtr	NA	Yes	
2E11-F027B	2	B	6" MO Gate	D-5	H-26014	Suppression Pool Spray	C	Qtr	NA	Yes	
2E11-F028A	2	A	16" MO Gate	C-6	H-26015	Suppression Pool Spray Outbrd. Iso	C	Qtr	CIV	Yes	
2E11-F028B	2	A	16" MO Gate	C-7	H-26014	Suppression Pool Spray Outbrd. Iso	C	Qtr	CIV	Yes	
2E11-F029	2	AC	1" Relief	E-9	H-26015	RHR Pump Suc. Cont. Iso	C	Note 3	CIV	No	

SYSTEM: Residual Heat Removal

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E11-F030A	2	AC	1" Relief	F-8	H-26014	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	
2E11-F030B	2	AC	1" Relief	F-4	H-26015	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	
2E11-F030C	2	AC	1" Relief	F-10	H-26014	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	
2E11-F030D	2	AC	1" Relief	F-2	H-26015	RHR Pump Suction Cont. Iso	C	Note 3	CIV	No	
2E11-F031A	2	C	20" Check	H-6	H-26015	RHR Pump Discharge	C	Note 5	NA	No	
2E11-F031B	2	C	20" Check	H-6	H-26014	RHR Pump Discharge	C	Note 5	NA	No	
2E11-F031C	2	C	20" Check	H-9	H-26015	RHR Pump Discharge	C	Note 5	NA	No	
2E11-F031D	2	C	20" Check	H-3	H-26014	RHR Pump Discharge	C	Note 5	NA	No	
2E11-F041A	2	A	1" AO Control	C-8	H-26015	RHR Inst. Iso	O	Qtr	CIV	Yes	
2E11-F041B	2	A	1" AO Control	D-2	H-26014	RHR Inst. Iso	O	Qtr	CIV	Yes	
2E11-F041C	2	A	1" AO Control	C-8	H-26015	RHR Inst. Iso	O	Qtr	CIV	Yes	
2E11-F041D	2	A	1" AO Control	C-2	H-26014	RHR Inst. Iso	O	Qtr	CIV	Yes	
2E11-F046A	2	C	3" Check	G-6	H-26015	RHR Minimum Flow Line	C	Note 29	NA	No	
2E11-F046B	2	C	3" Check	H-5	H-26014	RHR Minimum Flow Line	C	Note 29	NA	No	
2E11-F046C	2	C	3" Check	G-9	H-26015	RHR Minimum Flow Line	C	Note 29	NA	No	
2E11-F046D	2	C	3" Check	G-2	H-26014	RHR Minimum Flow Line	C	Note 29	NA	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E11-F047A	2	B	16" MO Gate	E-5	H-26015	RHR Hx Shell Side Side Inlet	0	Qtr	NA	Yes	
2E11-F047B	2	B	16" MO Gate	E-6	H-26014	RHR Hx Shell Side Side Inlet	0	Qtr	NA	Yes	
2E11-F048A	2	B	24" MO Globe	D-5	H-26015	RHR Hx Shell Side Bypass	0	Qtr	NA	Yes	
2E11-F048B	2	B	24" MO Globe	E-6	H-26014	RHR Hx Shell Side Bypass	0	Qtr	NA	Yes	
2E11-F050A	1	AC	24" AO Check	D-9	H-26015	LPCI Injec. Iso	C	See 6.1.7	PIV	No	6.1.7
2E11-F050B	1	AC	24" AO Check	D-3	H-26014	LPCI Injec. Iso	C	See 6.1.7	PIV	No	6.1.7
2E11-F055A	2	AC	4" Relief	F-4	H-26015	RHR Hx Shell Relief Cont. Iso	C	Note 3	CIV	No	
2E11-F055B	2	AC	4" Relief	F-7	H-26014	RHR Hx Shell Relief Cont. Iso	C	Note 3	CIV	No	
2E11-F065A	2	B	24" AO Bfly	F-8	H-26015	RHR Torus Suction	0	Qtr	NA	Yes	
2E11-F065B	2	B	24" AO Bfly	F-3	H-26014	RHR Torus Suction	0	Qtr	NA	Yes	
2E11-F065C	2	B	24" AO Bfly	F-9	H-26015	RHR Torus Suction	0	Qtr	NA	Yes	
2E11-F065D	2	B	24" AO Bfly	F-2	H-26014	RHR Torus Suction	0	Qtr	NA	Yes	
2E11-F078A	2	C	10" Check	E-4	H-26015	RHR Hx Ser Wtr Tie	C	RO	NA	No	6.1.8
2E11-F078B	2	C	10" Check	E-7	H-26014	RHR Hx Ser Wtr Tie	C	RO	NA	No	6.1.8
2E11-F091A	2	B	6" MO Globe	E-2	H-26015	Steam Line to RHR Hx Shutdwn	C	Qtr	NA	Yes	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E11-F091B	2	B	6" MO Globe	E-9	H-26014	Steam Line to RHR Hx Shutdown	C	Qtr	NA	Yes	
2E11-F097	2	AC	3" Relief	E-9	H-26015	Steam Line Relief Cont. Iso	C	Note 3	CIV	No	
2E11-F103A	2	A	1" MO Globe	E-4	H-26015	RHR Hx Vent Cont Iso	C	Qtr	CIV	Yes	
2E11-F103B	2	A	1" MO Globe	E-7	H-26014	RHR Hx Vent Cont Iso	C	Qtr	CIV	Yes	
2E11-F140A	2	B	6" MO Gate	E-2	H-26015	Steam Line to RHR Hx Shutdown	C	Qtr	NA	Yes	
2E11-F140B	2	B	6" MO Gate	E-9	H-26014	Steam Line to RHR Hx Shutdown	C	Qtr	NA	Yes	
2E11-F068A	3	B	10" MO Ball	C-10	H-26015	RHR Hx Ser. Wtr Disch.	C	Note 6	NA	No	
2E11-F068B	3	B	10" MO Ball	G-10	H-26014	RHR Hx Ser. Wtr Disch.	C	Note 6	NA	No	
2E11-F073A	2	B	10" MO Gate	G-4	H-26015	RHR Ser. Wtr Intertie	C	Qtr	NA	Yes	
2E11-F073B	2	B	10" MO Gate	G-7	H-26014	RHR Ser. Wtr Intertie	C	Qtr	NA	Yes	
2E11-F075A	2	B	10" MO Gate	G-4	H-26015	RHR Ser. Wtr Intertie	C	Qtr	NA	Yes	
2E11-F075B	2	B	10" MO Gate	G-7	H-26014	RHR Ser. Wtr Intertie	C	Qtr	NA	Yes	
2E11-F119A	3	B	18" MO Gate	C-8	H-21039	RHR Ser. Wtr Train A & B Cross	C	Qtr	NA	Yes	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E11-F119B	3	B	18" MO Gate	G-8	H-21039	RHR Ser. Wtr Train A & B Cross	C	Qtr	NA	Yes	
2E11-F126A	3	B	1-1/2" AO PCV	B-2	H-21039	Seal Water to RHR S.W. Pump Pressure Control	C	Note 9	NA	No	
2E11-F126B	3	B	1-1/2" AO PCV	J-2	H-21039	Seal Water to RHR S.W. Pump Pressure Control	C	Note 9	NA	No	
2E11-F201A	3	B	1" Solenoid	B-3	H-21039	RHR Service Water Pump Cooling Water	C	Note 7	NA	No	
2E11-F201B	3	B	1" Solenoid	F-3	H-21039	RHR Service Water Pump Cooling Water	C	Note 7	NA	No	
2E11-F201C	3	B	1" Solenoid	D-2	H-21039	RHR Service Water Pump Cooling Water	C	Note 7	NA	No	
2E11-F201D	3	B	1" Solenoid	G-2	H-21039	RHR Service Water Pump Cooling Water	C	Note 7	NA	No	
2E11-F207A	3	B	2" AO PCV	B-4	H-21034	RHR Service Water Pump Min. Flow	C	Note 9	NA	No	
2E11-F207B	3	B	2" AO PCV	F-4	H-21034	RHR Service Water Pump Min. Flow	C	Note 9	NA	No	
2E11-F207C	3	B	2" AO PCV	D-4	H-21034	RHR Service Water Pump Min. Flow	C	Note 9	NA	No	
2E11-F207D	3	B	2" AO PCV	G-4	H-21034	RHR Service Water Pump Min. Flow	C	Note 9	NA	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Rec'd	Relief Request
2E21-F001A	2	A	20" MO Gate	G-7	H-26018	CS Pump Suction Out	0	Qtr	CIV	Yes	
2E21-F001B	2	A	20" MO Gate	H-7	H-26018	CS Pump Suction Out	0	Qtr	CIV	Yes	
2E21-F003A	2	C	12" Check	F-7	H-26018	CS Pump Discharge	0	Note 5	NA	No	
2E21-F003B	2	C	12" Check	F-9	H-26018	CS Pump Discharge	0	Note 5	NA	No	
2E21-F004A	1	B	10" MO Gate	E-6	H-26018	CS Outbrd. Injection	0	Qtr	NA	Yes	
2E21-F004B	1	B	10" MO Gate	C-6	H-26018	CS Outbrd. Injection	0	Qtr	NA	Yes	
2E21-F005A	1	A	10" MO Gate	E-5	H-26018	CS Outbrd. Cont. Iso	C	Qtr	PIV	Yes	
2E21-F005B	1	A	10" MO Gate	C-5	H-26018	CS Outbrd. Cont. Iso	C	Qtr	PIV	Yes	
2E21-F006A	1	AC	10" AO Check	D-4	H-26018	CS Injection	C	See 6.1.7	CIV	No	6.1.7
2E21-F006B	1	AC	10" AO Check	D-4	H-26018	CS Injection	C	See 6.1.7	CIV	No	6.1.7
2E21-F012A	2	C	2" Relief	E-7	H-26018	CS Pump Disch. Relief	C	Note 3	NA	No	
2E21-F012B	2	C	2" Relief	C-8	H-26018	CS Pump Disch. Relief	C	Note 3	NA	No	
2E21-F015A	2	A	10" MO Globe	D-7	H-26018	Core Spray Test Bypass Cont. Iso	C	Qtr	CIV	Yes	
2E21-F015B	2	A	10" MO Globe	D-7	H-26018	Core Spray Test Bypass Cont. Iso	C	Qtr	CIV	Yes	
2E21-F019A	2	B	20" AO Bfly	G-5	H-26018	Core Spray Pump Torus Suc.	0	Qtr	NA	Yes	
2E21-F019B	2	B	20" AO Bfly	H-5	H-26018	Core Spray Pump Torus Suc.	0	Qtr	NA	Yes	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E21-F031A	2	B	3" MO Gate	F-8	H-26018	CS Pump Min. Flow	0	Qtr	NA	Yes	
2E21-F031B	2	B	3" MO Gate	F-9	H-26018	CS Pump Min. Flow	0	Qtr	NA	Yes	
2E21-F036A	2	AC	3" Check	E-8	H-26018	CS Test Line Cont. Iso	C	See 6.1.6	CIV	No	6.1.6
2E21-F036B	2	AC	3" Check	E-9	H-26018	CS Test Line Cont. Iso	C	See 6.1.6	CIV	No	6.1.6
2E21-F044A	2	AC	1-1/2" Stop Check	E-1	H-26018	Jockey Pump Cont. Iso	0	RO	CIV	No	6.1.1
2E21-F044B	2	AC	1-1/2" Stop Check	E-9	H-26018	Jockey Pump Cont. Iso	0	RO	CIV	No	6.1.1

SYSTEM: MSIV Leakage Control System

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E32-F001B, F, K, P	1	A	1-1/2" MO Globe	E-8	H-26022	MSIV Leakage Control Cont. Iso	C	Qtr	CIV	Yes	
2E32-F002B, F, K, P	2	B	1-1/2" MO Globe	E-7	H-26022	MSIV Leakage Control Cont. Iso	C	Qtr	NA	Yes	
2E32-F003B, F, K, P	2	B	1-1/2" MO Globe	E-5	H-26022	MSIV Leakage Control Cont. Iso	C	Qtr	NA	Yes	
2E32-F006	2	B	1-1/2" MO Globe	C-11	H-26022	MSIV Leakage Control	C	CS	NA	Yes	6.1.20
2E32-F007	2	B	1-1/2" MO Globe	D-11	H-26022	MSIV Leakage Control	C	CS	NA	Yes	6.1.20
2E32-F008	2	B	1-1/2" MO Globe	C-10	H-26022	MSIV Leakage Control	C	CS	NA	Yes	6.1.20
2E32-F009	2	B	1-1/2" MO Globe	D-10	H-26022	MSIV Leakage Control	C	CS	NA	Yes	6.1.20

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E41-F001	2	B	10" MO Gate	E-10	H-26020	HPCI Steam Supply Shutoff	C	Qtr	NA	Yes	
2E41-F002	1	A	10" MO Gate	C-3	H-26020	HPCI Steam Supply Inbrd. Iso	O	Qtr	CIV	Yes	6.1.2
2E41-F003	1	A	10" MO Gate	C-4	H-26020	HPCI Steam Supply Outbrd. Iso	O	Qtr	CIV	Yes	
2E41-F004	2	B	16" MO Gate	D-7	H-26020	HPCI Pump Suc. from Cond. Stg.	O	Qtr	NA	Yes	
2E41-F005	2	C	14" Check	E-5	H-26020	HPCI Pump Disch.	C	Note 5	NA	No	
2E41-F006	2	A	14" MO Gate	E-4	H-26020	HPCI Pump Inbrd. Disch. Iso	C	See 6.1.10	PIV	Yes	6.1.10
2E41-F007	2	B	14" MO Gate	E-5	H-26020	HPCI Pump Outbrd. Disch.	O	See 6.1.10	NA	Yes	6.1.10
2E41-F011	2	B	10" MO Gate	C-6	H-26020	HPCI Pump Redun. Shutoff to Cond. Stg.	C	Note 14	NA	No	
2E41-F012	2	A	4" MO Gate	F-6	H-26020	HPCI Pump Min. Flow Inbrd. Iso	C	Qtr	CIV	Yes	6.1.2
2E41-F019	2	C	16" Check	D-7	H-26020	HPCI Pump Suc. from Cond. Stg.	C	Note 5	NA	No	
2E41-F021	2	AC	12" Stop Check	G-3	H-26020	HPCI Turb. Exh. Inbrd. Iso	C	See 6.1.12	CIV	No	6.1.11 6.1.12

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E41-F022	2	AC	2" Stop Check	G-3	H-26020	HPCI Turb. Exh. Drn. Torus Iso	C	See 6.1.12	CIV	No	6.1.11 6.1.12
2E41-F035	2	B	2" AO PCV	F-7	H-26021	HPCI Turb. Lube Oil Cooling	C	Note 10	NA	No	
2E41-F040	2	AC	2" Check	G-4	H-26020	HPCI Turb. Exh. Drn. Torus Iso	C	See 6.1.12	CIV	No	6.1.12
2E41-F041	2	B	16" MO Gate	D-7	H-26020	HPCI Pump Suc. Shutoff	C	Qtr	NA	Yes	
2E41-F042	2	A	16" MO Gate	H-4	H-26020	HPCI Pump Suc. Torus Outbrd. Iso	C	Qtr	CIV	Yes	
2E41-F045	2	C	16" Check	H-5	H-26020	HPCI Pump Suction	C	See 6.1.13	NA	No	6.1.13
2E41-F046	2	AC	4" Check	F-6	H-26020	HPCI Pump Min Flow Outbrd. Iso	C	Note 5	CIV	No	
2E41-F049	2	AC	20" Check	G-4	H-26020	HPCI Turb. Exh. Outbrd. Iso	C	See 6.1.12	CIV	No	6.1.12
2E41-F051	2	A	16" AO Bfly	H-4	H-26020	HPCI Pump Suc. Torus Inbrd. Iso	O	Qtr	CIV	Yes	
2E41-F059	2	B	2" MO Globe	F-7	H-26020	HPCI Turb. Lube Oil Cooling	C	Qtr	NA	Yes	
2E41-F104	2	A	2" MO Gate	F-2	H-26020	HPCI Vac. Relief Outbrd. Torus Iso	O	Qtr	CIV	Yes	
2E41-F111	2	A	2" MO Gate	G-1	H-26020	HPCI Vac. Relief Inbrd. Torus Iso	O	Qtr	CIV	Yes	

SYSTEM: Reactor Coolant Isolation Cooling

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2E51-F001	2	AC	10" Stop Check	G-5	H-26023	RCIC Turb. Exh. to Torus Iso	C	See 6.1.12	CIV	No	6.1.11 6.1.12
2E51-F002	2	AC	2" Stop Check	G-5	H-26023	RCIC Vac Pump Disch. to Torus Iso	C	See 6.1.12	CIV	No	6.1.11 6.1.12
2E51-F003	2	A	6" AO Bfly	H-6	H-26023	RCIC Pump Suction Torus Iso	O	Qtr	CIV	Yes	6.1.2
2E51-F007	1	A	4" MO Gate	C-5	H-26023	RCIC Steam Supply Inbrd. Iso	O	Qtr	CIV	Yes	6.1.2
2E51-F008	1	A	4" MO Gate	C-6	H-26023	RCIC Steam Supply Outbrd Iso	O	Qtr	CIV	Yes	
2E51-F013	2	A	4" MO Gate	D-6	H-26023	RCIC Feedwater Inj.	C	Qtr	PIV	Yes	
2E51-F019	2	A	2" MO Globe	E-7	H-26023	RCIC Pump Min. Flow Torus Iso	C	Note 8	CIV	No	6.1.2
2E51-F021	2	AC	2" Check	E-7	H-26023	RCIC Pump Min. Flow Torus Iso	C	Note 5	CIV	No	
2E51-F028	2	AC	2" Check	F-7	H-26023	RCIC Vac. Pump Disch. Torus Iso	C	See 6.1.12	CIV	No	6.1.12
2E51-F031	2	A	6" MO Gate	H-6	H-26023	RCIC Pump Suction Torus Iso	O	Qtr	CIV	Yes	
2E51-F040	AC	AC	10" Check	F-5	H-26023	RCIC Turb. Exh. Torus Iso	C	See 6.1.12	CIV	Yes	6.1.12
2E51-F104	2	A	1-1/2" MO Gate	F-5	H-26023	RCIC Vac. Brker Torus Iso	O	Qtr	CIV	Yes	
2E51-F105	2	A	1-1/2" MO Gate	F-4	H-26023	RCIC Vac. Brker Torus Iso	O	Qtr	CIV	Yes	6.1.2

SYSTEM: Radwaste

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2G11-F003	2	A	3" AO Gate	B-3	H-26026	DW Flr. Drns. Cont. Iso	0	Qtr	CIV	Yes	
2G11-F004	2	A	3" AO Gate	B-4	H-26026	DW Flr. Drns. Cont. Iso	0	Qtr	CIV	Yes	
2G11-F019	2	A	3" AO Gate	E-4	H-26026	DW Equip. Drns. Cont. Iso	0	Qtr	CIV	Yes	
2G11-F020	2	A	3" AO Gate	E-4	H-26026	DW Equip. Drns. Cont. Iso	0	Qtr	CIV	Yes	
2G11-F852	2	AE	1-1/2" Man Gate	E-11	H-26026	Chem. drains Cont. Iso	LC	Note 1	CIV	No	
2G11-F853	2	AE	1-1/2" Man Gate	D-11	H-26026	Chem. drains Cont. Iso	LC	Note 1	CIV	No	

SYSTEM: Reactor Water Cleanup

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2G31-F001	1	A	6" MO Gate	C-2	H-26036	RWCU Pump Suc. Inbrd. Iso	0	Qtr	CIV	Yes	
2G31-F004	1	A	6" MO Gate	C-3	H-26036	RWCU Pump Suc. Outbrd. Iso	0	Qtr	CIV	Yes	

SYSTEM: Fuel Pool Cooling and Cleanup

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2G41-F017	3	B	6" Man Gate	G-1	H-26039	Fuel Pool Cooling RHR Intertie	C	Qtr	NA	No	
2G41-F019	3	B	6" Man Bfly	G-2	H-26039	Fuel Pool Cooling RHR Intertie	O	Qtr	NA	No	
2G41-F033	3	B	6" Man Bfly	E-11	H-26039	Fuel Pool Cooling RHR Intertie	O	Qtr	NA	No	
2G41-F034	3	B	6" Man Gate	E-11	H-26039	Fuel Pool Cooling RHR Intertie	C	Qtr	NA	No	

SYSTEM: Torus Drainage and Purification System

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2G51-F002	2	AE	8" Man Gate	D-4	H-26042	Torus Drain and Purif. Cont. Iso	LC	Note 1	CIV	No	
2G51-F011	2	AE	3" AO Control	C-5	H-26042	Torus Drain and Purif. Cont. Iso	LO	Qtr	CIV	Yes	
2G51-F012	2	AE	3" AO Control	C-5	H-26042	Torus Drain and Purif. Cont. Iso	LO	Qtr	CIV	Yes	

SYSTEM: Demineralized Water

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P21-F032	2	AE	2" Manual Gate	F-2	H-26047	Demin. Water Cont. Iso	LC	Note 1	CIV	No	
2P21-F034	2	AE	2" Manual Gate	F-2	H-26047	Demin. Water Cont. Iso	LC	Note 1	CIV	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P33-F002	2	A	1" AO Control	B-4	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F003	2	A	1" AO Control	C-4	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F004	2	A	1" AO Control	D-4	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F005	2	A	1" AO Control	E-4	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F006	2	A	1" AO Control	F-4	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F007	2	A	1" AO Control	H-4	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F010	2	A	1" AO Control	B-5	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F011	2	A	1" AO Control	C-5	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F012	2	A	1" AO Control	D-5	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F013	2	A	1" AO Control	E-5	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F014	2	A	1" AO Control	F-5	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	
2P33-F015	2	A	1" AO Control	H-5	H-26048	H ₂ & O ₂ Analy. Cont. Iso	0	Qtr	CIV	Yes	

SYSTEM: Plant Service Water

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P41-F024A	3	C	1-1/2" Check	D-4	H-26051	HPCI Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
2P41-F024B	3	C	1-1/2" Check	D-5	H-26051	HPCI Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
2P41-F025A	3	C	3" Check	D-6	H-26051	RHR & CS Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
2P41-F025B	3	C	3" Check	D-6	H-26051	RHR & CS Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
2P41-F026A	3	C	3" Check	C-8	H-26050	RHR Pump Cooler	C	See 6.1.14	NA	No	6.1.14
2P41-F026B	3	C	3" Check	C-9	H-26050	RHR Pump Cooler	C	See 6.1.14	NA	No	6.1.14
2P41-F028A	3	C	1-1/2" Check	C-5	H-26050	RCIC Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
2P41-F028B	3	C	1-1/2" Check	C-4	H-26050	RCIC Pump Room Cooler	C	See 6.1.14	NA	No	6.1.14
2P41-F035A	3	B	2" AO Globe	C-4	H-26051	HPCI Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F035B	3	B	2" AO Globe	C-5	H-26051	HPCI Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F036A	3	B	3" AO Globe	C-5	H-26051	RHR & CS Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F036B	3	B	3" AO Globe	C-6	H-26051	RHR & CS Pump Room Cooler	C	Qtr	NA	Yes	6.1.15

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P41-F037A	3	B	1-1/2" A0 Globe	D-7	H-26050	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F037B	3	B	1-1/2" A0 Globe	C-9	H-26051	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F037C	3	B	1-1/2" A0 Globe	D-8	H-26050	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F037D	3	B	1-1/2" A0 Globe	C-8	H-26051	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F039A	3	B	3" A0 Globe	D-9	H-26050	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F039B	3	B	3" A0 Globe	D-9	H-26050	RHR Pump Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F040A	3	B	2" A0 Globe	D-5	H-26050	RCIC Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F040B	3	B	2" A0 Globe	D-5	H-26050	RCIC Pump Room Cooler	C	Qtr	NA	Yes	6.1.15
2P41-F042A	3	B	3" A0 Globe	C-2	H-26051	CRD Pump Room Cooler	O	Qtr	NA	Yes	6.1.15
2P41-F042B	3	B	3" A0 Globe	C-3	H-26051	CRD Pump Room Cooler	O	Qtr	NA	Yes	6.1.15
2P41-F096A	3	B	8" A0 Bfly	E-4	H-26050	Drywell Cooler	O	CS	NA	Yes	6.1.16
2P41-F096B	3	B	8" A0 Bfly	E-2	H-26050	Drywell Cooler	O	CS	NA	Yes	6.1.16
2P41-F315A	3	B	10" M0 Bfly	A-9	H-21033	S.W. to Reactor Bldg. Shutoff	LO	Note 15	NA	No	
2P41-F315B	3	B	10" M0 Bfly	F-9	H-21033	S.W. to Reactor Bldg. Shutoff	LO	Note 15	NA	No	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P41-F316A	3	B	30" MO Bfly	A-9	H-21033	S.W. to Turbine Bldg. Shutoff	0	CS	NA	Yes	6.1.17
2P41-F316B	3	B	30" MO Bfly	F-9	H-21033	S.W. to Turbine Bldg. Shutoff	0	CS	NA	Yes	6.1.17
2P41-F316C	3	B	30" MO Bfly	A-10	H-21033	S.W. to Turbine Bldg. Shutoff	0	CS	NA	Yes	6.1.17
2P41-F316D	3	B	30" MO Bfly	F-10	H-21033	S.W. to Turbine Bldg. Shutoff	0	CS	NA	Yes	6.1.17
2P41-F319A	3	B	1" Solenoid	B-1	H-21033	S.W. Pump Cooling Water Shutoff	0	Note 7	NA	No	
2P41-F319B	3	B	1" Solenoid	C-1	H-21033	S.W. Pump Cooling Water Shutoff	0	Note 7	NA	No	
2P41-F319C	3	B	1" Solenoid	E-1	H-21033	S.W. Pump Cooling Water Shutoff	0	Note 7	NA	No	
2P41-F319D	3	B	1" Solenoid	G-1	H-21033	S.W. Pump Cooling Water Shutoff	0	Note 7	NA	No	
2P41-F320A	3	B	3" AO PCV	A-3	H-21033	S.W. Pump Min. Flow	C	Note 9	NA	No	
2P41-F320B	3	B	3" AO PCV	C-3	H-21033	S.W. Pump Min. Flow	C	Note 9	NA	No	
2P41-F320C	3	B	3" AO PCV	E-3	H-21033	S.W. Pump Min. Flow	C	Note 9	NA	No	
2P41-F320D	3	B	3" AO PCV	F-3	H-21033	S.W. Pump Min. Flow	C	Note 9	NA	No	

SYSTEM: Plant Service Water

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P41-F334A	3	B	1" AO PCV	C-7	H-21033	S.W. Pump Cooling Water Press. Reg.	-	Note 9	NA	No	
2P41-F334B	3	B	1" AO PCV	G-1	H-21033	S.W. Pump Cooling Water Press. Reg.	-	Note 9	NA	No	
2P41-F339A	3	B	6" AO Bfly	H-9	H-21033	Diesel Gen. Cooling	C	Qtr	NA	Yes	6.1.15
2P41-F339B	3	B	6" AO Bfly	H-7	H-21033	Diesel Gen. Cooling	C	Qtr	NA	Yes	6.1.15
2P41-F340	3	B	6" AO Bfly	H-5	H-21033	Diesel Gen. Cooling	C	Qtr	NA	Yes	5.1.15

SYSTEM: RB Closed Cooling Water

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P42-F051	2	A	6" MO Gate	B-5	H-26055	RBCCW to Recir. Cont. Iso	0	CS	CIV	Yes	6.1.18
2P42-F052	2	A	6" MO Gate	C-5	H-26055	RBCCW to Recir. Cont. Iso	0	CS	CIV	Yes	6.1.18

SYSTEM: Service Air

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P51-F513	2	AE	2" Man. Globe	F-3	H-26058	Ser. Air Cont. Iso	LC	Note 1	CIV	No	
2P51-F651	2	AE	2" Man. Globe	F-3	H-26058	Ser. Air Cont. Iso	LC	Note 1	CIV	No	

SYSTEM: Chilled Water System

Plant Hatch - Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P64-F045	2	A	6" MO Globe	G-11	H-26081	Chilled Water Cont. Iso	0	CS	CIV	Yes	6.1.16
2P64-F047	2	A	6" MO Globe	G-8	H-26081	Chilled Water Cont. Iso	0	CS	CIV	Yes	6.1.16

SYSTEM: Drywell Pneumatic

Plant Hatch - Unit 2 Valve Testing Program

Sh. 33 of 43

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2P70-F002	2	A	1" AO Control	F-8	H-26066	DW Pneumatic Cont. Iso	0	Qtr	CIV	Yes	
2P70-F003	2	A	1" AO Control	F-8	H-26066	DW Pneumatic Cont. Iso	0	Qtr	CIV	Yes	
2P70-F004	2	A	2" AO Control	C-7	H-26066	DW Pneumatic Cont. Iso	0	Qtr	CIV	Yes	
2P70-F005	2	A	2" AO Control	D-7	H-26066	DW Pneumatic Cont. Iso	0	Qtr	CIV	Yes	
2P70-F020	2	AC	2" Check	C-6	H-26066	DW Pneumatic Cont. Iso	0	RO	CIV	No	6.1.1

SYSTEM: ILRT

Plant Hatch Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T23-F004	2	A	3/4" Man. Globe	D-3	H-26057	ILRT Cont. Iso	C	Note 1	CIV	No	
2T23-F005	2	A	3/4" Man. Globe	D-3	H-26057	ILRT Cont. Iso	C	Note 1	CIV	No	

SYSTEM: Fire Protection

Plant Hatch Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T43-F159	2	AC	3" Check	F-5	H-21017	Fire Protection Cont. Iso	C	Note 1	CIV	No	
2T43-F160	2	AE	3" Man. Gate	F-5	H-21017	Fire Protection Cont. Iso	LC	Note 1	CIV	No	

SYSTEM: Standby Gas Treatment

Plant Hatch Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T46-F001A	3	B	18" AO Bfly	C-2	H-26078	Filter Bed Inlet from Reactor Bldg.	C	Qtr	NA	Yes	
2T46-F001B	3	B	18" AO Bfly	G-2	H-26078	Filter Bed Inlet from Reactor Bldg.	C	Qtr	NA	Yes	
2T46-F002A	3	B	18" AO Bfly	C-5	H-26078	SGTS Filter Bed Outlet	C	Qtr	NA	Yes	
2T46-F002B	3	B	18" AO Bfly	G-5	H-26078	SGTS Filter Bed Outlet	C	Qtr	NA	Yes	
2T46-F003A	3	B	18" AO Bfly	C-2	H-26078	SGTS Filter Bed Inlet from Refuel Floor	C	Qtr	NA	Yes	
2T46-F003B	3	B	18" AO Bfly	G-2	H-26078	SGTS Filter Bed Inlet from Refuel Floor	C	Qtr	NA	Yes	

SYSTEM: Containment Purge and Inerting

Plant Hatch Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T48-F103	2	A	6" AO Bfly	D-10	H-26083	DW & Torus Supply Iso	C	Qtr	CIV	Yes	
2T48-F104	2	A	1" AO Control	G-4	H-26083	Dwg & Torus Outbrd. Iso	C	Qtr	CIV	Yes	
2T48-F113	2	A	2" AO Control	G-9	H-26083	DW Inerting Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F114	2	A	2" AO Control	H-9	H-26083	DW Inerting Inbrd Iso	C	Qtr	CIV	Yes	
2T48-F115	2	A	2" AO Control	G-10	H-26083	DW Inerting Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F116	2	A	2" AO Control	H-10	H-26083	DW Inerting Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F118A	2	A	1" Solenoid	J-4	H-26083	Torus Makeup Inbrd Iso	O	Qtr	CIV	Yes	
2T48-F113B	2	A	1" Solenoid	J-5	H-26083	Torus Makeup Inbrd Iso	O	Qtr	CIV	Yes	
2T48-F321	2	A	2" AO Control	G-7	H-26083	DW Inerting Outbrd. Iso	C	Qtr	CIV	Yes	
2T48-F322	2	A	2" AO Control	H-7	H-26083	DW Inerting Inbrd. Iso	C	Qtr	CIV	Yes	
2T48-F325	2	A	2" AO Control	G-8	H-26083	Torus Inerting Outbrd. Iso	C	Qtr	CIV	Yes	
2T48-F327	2	A	2" AO Control	H-8	H-26083	Torus Inerting Inbrd. Iso	C	Qtr	CIV	Yes	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T48-F307	2	A	18" AO Bfly	C-9	H-26084	DW Purge Inlet Inbrd Iso	C	Note 1	CIV	No	
2T48-F308	2	A	20" AO Bfly	C-10	H-26084	DW Purge Inlet Inbrd Iso	C	Note 1	CIV	No	
2T48-F309	2	A	18" AO Bfly	E-10	H-26084	Torus Purge Inlet Inbrd Iso	C	Note 1	CIV	No	
2T48-F310	2	A	20" AO Bfly	F-10	H-26084	Torus Purge Vac. Brkr Iso	C	Qtr	CIV	Yes	
2T48-F311	2	A	20" AO Bfly	F-9	H-26084	Torus Purge Vac. Brkr Iso	C	Qtr	CIV	Yes	
2T48-F318	2	A	18" AO Bfly	G-4	H-26084	Torus Purge Outlet Inbrd Iso	O	Qtr	CIV	Yes	
2T48-F319	2	A	18" AO Bfly	C-4	H-26084	DW Purge Outlet Inbrd Iso	C	Note 1	CIV	Yes	
2T48-F320	2	A	18" AO Bfly	C-3	H-26084	DW Purge Outlet Outbrd Iso	C	Note 1	CIV	No	
2T48-F323A	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323B	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323C	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323D	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323E	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	

SYSTEM: Containment Purge and Inerting

Plant Hatch Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T48-F323F	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323G	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323H	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323I	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323J	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323K	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F323L	2	C	18" AO Check	G-8	H-26084	DW to Torus Vac. Breaker	C	Qtr	NA	No	
2T48-F324	2	A	18" AO Bfly	D-10	H-26084	Torus Purge Inlet Outbrd. Iso	C	Note 1	CIV	No	
2T48-F326	2	A	18" AO Bfly	G-3	H-26084	Torus Purge Outlet Outbrd. Iso	C	Qtr	CIV	Yes	
2T48-F328A	2	AC	20" AO Check	G-10	H-26084	Reactor Bldg. to Suppression Cham Vac. Brker	O	Qtr	CIV	No	
2T48-F328B	2	AC	20" AO Check	G-9	H-26084	Reactor Bldg. to Suppression Cham Vac. Brker	C	Qtr	CIV	No	

SYSTEM: Containment Purge and Inerting

Plant Hatch Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T48-F332A	2	A	2" AO Control	E-3	H-26084	Torus Purge Outlet Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F332B	2	A	2" AO Control	G-3	H-26084	Torus Purge Outlet Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F333A	2	A	2" AO Control	E-4	H-26084	Torus Purge Outlet Inbrd Iso	C	Qtr	CIV	Yes	
2T48-F333B	2	A	2" AO Control	G-4	H-26084	Torus Purge Outlet Inbrd Iso	C	Qtr	CIV	Yes	
2T48-F334A	2	A	2" AO Control	B-3	H-26084	DW Purge Outlet Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F334B	2	A	2" AO Control	C-3	H-26084	DW Purge Outlet Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F335A	2	A	2" AO Control	B-4	H-26084	DW Purge Outlet Inbrd Iso	C	Qtr	CIV	Yes	
2T48-F335B	2	A	2" AO Control	C-4	H-26084	DW Purge Outlet Inbrd Iso	C	Qtr	CIV	Yes	
2T48-F338	2	A	2" Diaphragm	H-2	H-26084	Bypass-Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F339	2	A	2" Diaphragm	H-3	H-26084	Bypass-Inbrd Iso	C	Qtr	CIV	Yes	
2T48-F340	2	A	2" Solenoid	D-2	H-26084	Bypass-Outbrd Iso	C	Qtr	CIV	Yes	
2T48-F341	2	A	2" Solenoid	E-4	H-26084	Bypass-Inbrd Iso	C	Qtr	CIV	Yes	

Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T48-F342A	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T43-F342B	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342C	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342D	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342E	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342F	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342G	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342H	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342I	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342J	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342K	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	
2T48-F342L	2	A	1/2" Solenoid	H-8	H-26084	Torus to DW Vac Breaker Iso	C	Note 12	CIV	No	

SYSTEM: Containment Purge and Inerting

Plant Hatch Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T48-F361A	2	A	1" AO Control	G-9	H-26084	Torus Water Level Iso	0	Qtr	CIV	Yes	
2T48-F361B	2	A	1" AO Control	G-5	H-26084	Torus Water Level Iso	0	Qtr	CIV	Yes	
2T48-F362A	2	A	1" AO Control	H-9	H-26084	Torus Water Level Iso	0	Qtr	CIV	Yes	
2T48-F362B	2	A	1" AO Control	H-5	H-26084	Torus Water Level Iso	0	Qtr	CIV	Yes	
2T48-F363A	2	A	1" AO Control	E-8	H-26084	Press. Transmitter Iso	0	Qtr	CIV	Yes	
2T48-F363B	2	A	1" AO Control	D-6	H-26084	Press. Transmitter Iso	0	Qtr	CIV	Yes	
2T48-F364A	2	A	1" AO Control	G-8	H-26084	Press. Transmitter Iso	0	Qtr	CIV	Yes	
2T48-F364B	2	A	1" AO Control	G-5	H-26079	Press. Transmitter Iso	0	Qtr	CIV	Yes	
2T48-F209	2	A	4" AO Gate	C-9	H-26079	DW Torus Δ P Iso	0	Qtr	CIV	Yes	
2T48-F210	2	A	4" AO Gate	C-9	H-26079	DW Torus Δ P Iso	0	Qtr	CIV	Yes	
2T48-F211	2	A	4" AO Gate	E-8	H-26079	DW Torus Δ P Iso	0	Qtr	CIV	Yes	
2T48-F212	2	A	4" AO Gate	E-8	H-26079	DW Torus Δ P Iso	0	Qtr	CIV	Yes	

SYSTEM: Containment Purge and Inerting

Plant Hatch Unit 2 Valve Testing Program

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Valve No.	Code Class	Cat	Description	Coord.	P&ID	Function	Norm Pos	Exercise	Leakage	Stroke Time Req'd	Relief Request
2T49-F001A, B	2	B	4" MO Gate	C-3	H-26028	H ₂ Recomb. H ₂ from DW Shutoff	C	Qtr	NA	Yes	
2T49-F002A, B	2	A	4" MO Gate	C-4	H-26028	H ₂ Recomb. H ₂ from DW Iso	C	Qtr	CIV	Yes	
2T49-F003A, B	2	B	3" Flow Control	C-5	H-26028	H ₂ Recomb. H ₂ from DW Shutoff	C	Note 9	NA	No	
2T49-F004A, B	2	A	4" MO Gate	F-5	H-26028	H ₂ Recomb. Gas and Water Iso	C	Qtr	CIV	Yes	
2T49-F005A, B	2	B	4" MO Gate	F-4	H-26028	H ₂ Recomb. Gas and Water Iso	C	Qtr	NA	Yes	
2T49-F006A B	2	B	3/4" MO Globe	H-5	H-26028	H ₂ Recomb. Water Feed from RHR	C	Qtr	NA	Yes	
2T49-F007A B	2	B	3/4" MO Globe	H-8	H-26028	H ₂ Recomb. Water Feed from RHR	O	Qtr	NA	Yes	
2T49-F008A B	2	B	3" MO Globe	D-7	H-26028	H ₂ Recomb. Flow Control	O	Qtr	NA	Yes	
2T49-F009A B	2	AC	1-1/2" Relief	F-4	H-26028	Relief Valve Cont. Iso	C	Note 3	CIV	No	

Class 1, 2, and 3 Valve Testing Program

Notes

1. This valve will not be stroked because it is a passive containment isolation valve. It is normally closed and does not have to open to perform any safety-related function.
2. E11-F019 (or 2E11-F019) is a normally closed passive check valve in the head spray line. The only function of the valve is to provide head spray flow during shutdown to collapse the steam bubble.
3. The test frequency is as required by IWV-3511. The opening pressure will be determined per the requirements of ASME PTC 25.3-1976.
4. The testing of the Standby Liquid Control System explosive-actuated valves will be performed per the Technical Specifications requirements which exceed the requirements of IWV.
5. The opening function of this normally closed check valve is proven every 3 months during pump operability testing. Design flow will be passed through the valve.
6. This valve is a pressure or flow regulating valve that modulates. This valve is exempt from testing per the requirements of IWV-1200(a).
7. This fail-open solenoid valve will be removed per a design change in a future outage. In the interim, the power to the valve will be removed and the valve left in the open position. As a result the valve is not important to safety.
8. This valve is a minimum flow valve that opens and closes at set pressures. This valve is exempt from testing per IWV-1200(a). However, operability is proven during pump tests.
9. This valve is an AO pressure control valve that opens and closes at set pressures. This valve is exempt from testing per IWV-1200(a). However, the operability of the valve is shown during pump tests.
10. This valve is a self-modulating pressure control valve that is exempt from testing per IWV-1200(a). The fail-open position will be verified during pump testing by observing that the valve is open when there is no flow through the valve.
11. This check valve is normally full open, therefore it does not have to change position to perform any safety related function.
12. This valve is used for testing valves T48-F323A-L (or 2T48-F323A-L) and has no safety related function.
13. This normally-open feedwater check valve has an air assist for tight closure and position indicating lights. Closure will be proven each cold shutdown, but not more frequent than once per 3 months, by observing the indicating lights.

14. This normally closed valve is opened during testing only; therefore, it is passive and does not require testing.

15. This valve is locked open and has no safety related function requiring stroking the valve.

6.1 Relief Requests for Class 1, 2, and 3 Valves

6.1.1 Test Requirement

IWV-3521 requires that check valves be exercised at least once per 3 months.

6.1.1.1 Basis for Relief

This containment isolation valve is normally open with design flow passing through it during normal operation. The only practical method of verifying closure is to introduce reverse flow through the valve and measure leakage.

6.1.1.2 Alternate Testing

This verification is performed each refueling outage during local leak rate testing.

6.1.2 Test Requirement

IWV-3423d requires that gate valves with the functional differential pressure greater than 15 psi be tested for leakage in the same direction as when the valve is performing its function.

6.1.2.1 Basis for Relief

The correct direction is to pressurize from the inboard side of the valve; however, the piping on the inboard side runs directly from the valve to the torus (or the reactor vessel) and cannot be pressurized for testing.

6.1.2.2 Alternate Testing

This containment isolation valve will be leak rate tested in a non-conservative reverse direction as addressed in the containment leak rate test program for the type C leakage tests.

6.1.3 Test Requirement

IWV-3521 requires that check valves be exercised at least once per 3 months.

6.1.3.1 Basis for Relief

This valve is designed to prevent a water leg from forming in the relief line discharge line under vacuum conditions. Since there is no flow through the valve and it is a simple check valve it cannot be tested as required.

6.1.3.2 Alternate Testing

Each refueling outage (when the containment is de-inerted) the movement of the disc will be observed to see that it moves freely.

6.1.4 Test Requirement

IWV-3411 requires that valves be exercised at least once per 3 months.

6.1.4.1 Basis for Relief

This valve cannot be full-stroked during power operation because flow to the core would be reduced by one-half. The valve control circuitry does not allow partial stroking of the valve.

6.1.4.2 Alternate Testing

This valve will be tested each cold shutdown but not more frequently than once per 3 months.

6.1.5 Test Requirement

IWV-3521 requires that check valves be exercised at least once per 3 months.

6.1.5.1 Basis for Relief

This normally closed standby liquid control check valve cannot be opened without introducing flow through it with a pressure greater than reactor pressure.

6.1.5.2 Alternate Testing

Design flow through this valve is achieved once per 18 months due to the requirements of the Technical Specifications.

6.1.6 Test Requirement

IWV-3521 requires that check valves be exercised at least once per 3 months and IWV-3421 requires that Category A valves be leak tested.

6.1.6.1 Basis for Relief

Since there is no valve between the check valve and the torus the line cannot be pressurized to ensure closure of the valve. This valve is the inboard containment isolation valve for the core spray test line. The outboard isolation is a closed system as defined in the Appendix J program. This valve is sealed from the primary containment atmosphere because the test line terminates below the water level of the torus and the leakage is not included in the type C local leak rate testing.

6.1.6.2 Alternate Testing

The integrated leak rate test will prove that leakage through the valve and closed system does not occur. There are no other practical means of testing this check valve.

6.1.7 Test Requirements

IWV-3521 requires that check valves be exercised at least once per 3 months.

6.1.7.1 Basis for Relief

These normally closed check valves do not receive "full-open" flow during normal operation or shutdown conditions. There has been no practical method demonstrated to fully stroke these valves.

6.1.7.2 Alternate Testing

These valves were supplied with a test switch to allow partial stroking during operation; however, the design of the test mechanism does not provide proper testing. Modifications are to be performed, and if they prove successful, the valves will be partially stroked once per 3 months.

At least one of the RHR system check valves will receive shutdown cooling flow through it during cold shutdown conditions; however, the flow is not sufficient to fully open the valve.

Valve integrity will be proven during leak rate tests each refueling outage because this valve is a pressure isolation valve and must pass the leakage tests.

One of the two valves in the system will be disassembled on a rotating basis every other refueling outage. If the valve is determined to be non-functional, so that design flow would not pass through the valve, the other valve would then be disassembled and inspected.

6.1.8 Test Requirement

IWV-3521 requires that check valves be exercised at least once per cycle.

6.1.8.1 Basis for Relief

Testing of this normally closed check valve during normal operation requires removing the associated RHR train from operational status in order to relieve the differential pressure across the valve, thereby decreasing the level of plant reliability.

6.1.8.2 Alternate Testing

The valve will be tested each refueling outage but not more frequently than once per 3 months.

6.1.9 Test Requirement

IWV-3417(a) states that if an increase in stroke time of 25% or more from the previous test for valves with stroke times greater than ten seconds or 50% or more for valves with stroke times less than or equal to ten seconds is observed, test frequency shall be increased to once each month until corrective action is taken. Relief is requested for valves normally tested during cold shutdown.

6.1.9.1 Basis for Relief

Valves that are normally tested during cold shutdown or refueling cannot be tested once each month. Stroking these valves during power operation may place the plant in an unsafe condition.

6.1.9.2 Alternate Testing

These valves will be stroked every cold shutdown but not more frequently than once per 3 months.

6.1.10 Test Requirement

IWV-3411 requires that valves be exercised at least once per 3 months.

6.1.10.1 Basis for Relief

Valve E41-F007 cannot be closed during normal operation because its failure in the closed position would result in the loss of the HPCI system. Valve E41-F006 cannot be opened during normal power operation without first closing E41-F007.

6.1.10.2 Alternate Testing

The operability of E41-F006 and E41-F007 will be demonstrated during each cold shutdown but not more frequently than once per 3 months.

6.1.11 Test Requirement

IWV-3423 requires that valves be leak tested with the pressure differential in the same direction as when the valve is performing its function.

6.1.11.1 Basis for Relief

This turbine exhaust containment isolation valve is a normally closed stop check valve with the closure mechanism in the "locked open" position. The valve then functions as a simple check valve. The piping on the inboard side of the valve runs directly from the valve to the torus and cannot be pressurized for testing.

6.1.11.2 Alternate Testing

As an alternate, the valve is closed with the closure mechanism and leak tested from the reverse side. The leak test, as defined in the containment leak rate test program, is conservative since the test pressure tends to lift the disc from the seat much in the same manner as reverse testing a globe valve.

6.1.12 Test Requirement

IWV-3521 requires that check valves be exercised every 3 months.

6.1.12.1 Basis for Relief

Check valves E51-F001, E51-F002, E51-F028, E51-F040, E41-F021, E41-F022, E41-F040 and E41-F049 are located on the RCIC or HPCI turbine steam exhaust lines. During quarterly pump testing these valves are partially stroked during system operation; however, test conditions do not provide sufficient flow to prove that the valves are fully open.

6.1.12.2 Alternate Testing

One of these valves will be disassembled on a rotating basis each refueling outage. If the valve is determined to be non-functional, so that design flow would not pass through the valve, an additional valve will be disassembled. Failure of this valve would require disassembly of the remaining valves.

6.1.13 Test Requirement

IWV-3521 requires that check valves be exercised at least once per 3 months.

6.1.13.1 Basis for Relief

Valve E41-F045 is a normally closed check valve located on the HPCI pump suction line and cannot be stroked. This valve does not see flow during any normal mode of reactor operations or shutdown conditions. Testing of this valve would require pumping water from the torus to the condensate storage tank, thereby lowering the water quality in the tank.

6.1.13.2 Alternate Testing

Degradation of this valve is not expected because wear does not occur in a closed check valve. To ensure that the valve will open if needed, it will be disassembled every other refueling outage to prove that the disc is free to move.

6.1.14 Test Requirement

IWV-3521 requires that check valves be exercised at least once per 3 months.

6.1.14.1 Basis for Relief

Normally closed check valves P41-F024A&B, P41-F025A&B, P41-F026A&B, and P41-F028A&B (or Unit 2 valves 2P41-F024A&B, 2P41-F025A&B, 2P41-F026A&B, and 2P41-F028A&B) supply service water to RHR & Core Spray, HPCI, and RCIC pump and pump room coolers. During quarterly testing of the pumps the coolers are placed in operation, thereby stroking these valves. However, the design of the system does not provide for positive verification of the flow rate through each valve.

6.1.14.2 Alternate Testing

One valve will be disassembled each refueling outage on a rotating basis to ensure that the design function of the valve can be achieved. If the valve is determined to be non-functional an additional valve will be disassembled. Failure of this valve will require the disassembly of the remaining valves for that unit.

6.1.15 Test Requirement

IWV-3413(b) requires stroke times shall be measured to the nearest second, for stroke times 10 seconds or less, or 10% of the specified limiting stroke time for full-stroke times longer than 10 seconds.

IWV-3417 requires that if the stroke time increases by 25% from the previous test for valves with full-stroke times greater than 10 seconds or 50% for valves with full-stroke times less than 10 seconds, the test frequency shall be increased to once each month until corrective action is taken.

6.1.15.1 Basis for Relief

These valves are air operated valves without indicating lights or control switches. Measurement of stroke times can be performed only by observation of the stem movement when the associated room cooler is placed into operation. This type of testing does not provide the accuracy required by IWV-3413(b) and IWV-3417.

6.1.15.2 Alternate Testing

A maximum stroke time will be assigned to each valve. If the measured stroke time exceeds this value the valve will be declared inoperable.

6.1.16 Test Requirement

IWV-3411 requires that valves be exercised at least once per 3 months.

6.1.16.1 Basis for Relief

Closure of this normally open valve would totally interrupt flow to the drywell coolers. This interruption may cause an increase in drywell temperature which would require removing the unit from operation. The valve cannot be partially stroked due to control circuitry.

6.1.16.2 Alternate Testing

This valve will be stroked every cold shutdown but not more frequently than once per 3 months.

6.1.17 Test Requirement

IWV-3411 requires that valves be exercised at least once per 3 months.

6.1.17.1 Basis for Relief

Closure of this valve during normal power operation would interrupt flow to the turbine building equipment normally cooled by service water. This valve cannot be partially stroked due to control circuitry.

6.1.17.2 Alternate Testing

This valve will be stroked every cold shutdown but not more frequently than once per 3 months.

6.1.18 Test Requirement

IWV-3411 requires that valves be exercised at least once per 3 months.

6.1.18.1 Basis for Relief

Closure of this valve during normal operation would shut off the cooling water to a Reactor Recirculation System pump.

6.1.18.2 Alternate Testing

This valve will be stroked every cold shutdown but not more frequently than once per 3 months.

6.1.19 Test Requirement

IWV-3417(b) and IWV-3523 state that when corrective action is required as a result of tests made during cold shutdown, the condition shall be corrected before startup.

6.1.19.1 Basis for Relief

Startup of the plant is governed by the Technical Specifications.

6.1.19.2 Alternate Testing

Under such conditions startup shall be permitted as provided in the Technical Specifications.

6.1.20 Test Requirement

IWV-3411 requires that valves be exercised at least once per 3 months.

6.1.20.1 Basis for Relief

If this valve is opened during normal operation, a single failure of the second isolation valve in the line or operator error may result in damage to the lower-pressure piping and equipment. Due to control circuitry this valve cannot be partially stroked.

6.1.20.2 Alternate Testing

This valve will be stroked every cold shutdown but not more frequently than once per 3 months.

6.1.21 Test Requirement

IWV-3411 requires that valves be exercised at least once per 3 months.

6.1.21.1 Basis for Relief

Closure of this valve during normal power operation will interrupt cooling water flow to the reactor building equipment normally cooled by service water. The characteristics of the valve operator and its control logic permit the partial stroking of this valve; however, the position indicating lights show only the fully opened and fully closed positions. The potential that exists for interrupting flow to essential equipment during the partial stroking outweighs any gains that may exist.

6.1.21.2 Alternate Testing

This valve will be stroked every cold shutdown but not more frequently than once per 3 months.

6.1.22 Test Requirement

IWV-1100 provides the rules and requirements for inservice testing of certain Class 1, 2, and 3 valves which are required to perform a specific function in shutting down a reactor to the cold shutdown condition or in mitigating the consequences of an accident.

The Control Rod Drive (CRD) System valves will not be individually tested per this requirement.

6.1.22.1 Basis for Relief

The plant Technical Specifications require all operable withdrawn control rods to be exercised at least once per week when above a designated power level.

After each refueling outage all control rods capable of normal insertion shall be scram timed from the fully withdrawn position. Also, 10% of the rods shall be scram timed from the fully withdrawn position at least once per 120 days of operation. The Technical Specifications give the allowable insertion times for these tests.

6.1.22.2 Alternate Testing

The Technical Specifications adequately demonstrate the operability of the control rod drive system and the additional requirements of Section XI would not increase the level of safety. Therefore, Technical Specifications testing will be used in lieu of the Section XI requirements.

7.0 Inservice Testing of Pumps

The 1980 ASME Section XI code with Addenda thru Winter 1980 requires inservice testing of pumps in accordance with Section IWP. The inservice testing program for Class 1, 2, and 3 pumps is described in the following tables. Where full compliance with the Code is not practical, relief has been requested.

Per IWP-3210 Georgia Power Company has set their own allowable ranges of test qualities.

For the RHR Service Water Pumps, the Plant Service Water Pumps, and the Standby Diesel Generator Service Water Pumps the following ranges are different than those found in Table IWP-3100-2.

<u>Test Quantity</u>	<u>Acceptable</u>	<u>Alert</u>	<u>Required Action</u>
ΔP	.93 to $1.1 \Delta P_R$	$\geq .9$ and $< .93 \Delta P_R$	$< .9$ or $> 1.1 \Delta P_R$
Q	.94 to $1.1 Q_R$	$\geq .9$ and $< .94 Q_R$	$< .9$ or $> 1.1 Q_R$
$0 < V_R \leq 2.0$	$0 < V \leq 2 V_R$	$2 V_R < V \leq 3 V_R$	$V > 3 V_R$
$2 < V_R \leq 5$	$0 < V \leq (2 + V_R)$	$(2 + V_R) < V \leq (4 + V_R)$	$V > (4 + V_R)$
$V_R > 5$	$0 < V \leq (1.4 V_R)$	$1.4 V_R < V \leq 1.8 V_R$	$V > 1.8 V_R$

V_R is procedurally set to be a minimum of 1.5 mils. Per manufacturers recommendations these pumps will operate satisfactorily with vibrations in excess of 4 mils.

For the RHR Pumps, the Core Spray Pumps, the Standby Liquid Control Pumps, the Jockey Control Pumps, the Jockey Pumps, the HPCI pump, and the RCIC pump the following ranges are different than those found in Table IWP-3100-2.

<u>Test Quantity</u>	<u>Acceptable</u>	<u>Alert</u>	<u>Required Action</u>
ΔP	.93 to $1.05 \Delta P_R$	$\geq .9$ and $< .93 \Delta P_R$	$< .9$ or $> 1.05 \Delta P_R$
Q	.94 to $1.05 Q_R$	$\geq .9$ and $< .94 Q_R$	$< .9$ or $> 1.05 Q_R$

7.1 Relief Requests for Class 1, 2, and 3 Pumps

7.1.1 Test Requirement

IWP-4310 requires that the temperature of bearings outside the main flow path be measured.

7.1.1.1 Basis for Relief

The bearings (or bearing surfaces) are cooled by the process fluid that is being pumped.

7.1.1.2 Alternate Testing

The bearings will be inspected for wear whenever the pump is disassembled for maintenance.

The bearing temperature of the pump motor will be monitored.

7.1.2 Test Requirement

Table IWP-4110-1 requires that flow be measured within $\pm 2\%$ of full scale.

7.1.2.1 Basis for Relief

Flowrate is measured by the change in the Standby Liquid Control test tank level during a two minute test period.

7.1.2.2 Alternate Testing

Georgia Power Company has determined that the method of calculating flow is within an acceptable accuracy.

7.1.3 Test Requirement

Table IWP-4110-1 requires that pressure be measured within $\pm 2\%$ of full scale.

7.1.3.1 Basis for Relief

Inlet pressure is determined for this group by measuring the river level at the intake structure. The differential pressure is then:

$$P = P_o + (114.5' - \text{River Water Level}) \times .0433$$

7.1.3.2 Alternate Testing

This method of measurement is well within the code requirement for the determination of the differential pressure.

7.1.4 Test Requirement

Table IWP-3100-1 requires that the proper lubricant level or pressure be observed.

7.1.4.1 Basis for Relief

This pump is lubricated by the process fluid that is being pumped.

7.1.4.2 Alternate Testing

The lubricant level of the motor will be observed.

7.1.5 Test Requirement

Table IWP-3100-1 requires that inlet pressure, differential pressure, and flowrate be measured.

7.1.5.1 Basis for Relief

The Standby Liquid Control pumps are positive displacement pumps for which differential pressure positive is a constant regardless of inlet pressure.

7.1.5.2 Alternate Testing

The outlet pressure and the flowrate is measured.

7.1.6 Test Requirement

Table IWV-3100-1 requires that the proper lubricant level or pressure be observed.

7.1.6.1 Basis for Relief

The pump is lubricated by the process fluid that is being pumped.

7.1.6.2 Alternate Testing

For the other pumps without a lubricating system the motor oil is observed; however, the motor bearings for this pump have grease fittings.

7.1.7 Test Requirement

Table IWP-3100-1 requires that both the differential pressure and the flowrate be measured.

7.1.7.1 Basis for Relief

The only function of this pump is to maintain a water inventory in the RHR and Core spray piping system and flow rate instrumentation is not required. However, discharge is into a fixed resistance system; therefore, measurement of both parameters is not required to determine degradation of the pump.

7.1.7.2 Alternate Testing

The differential pressure will be measured during each pump test.

Plant Hatch - Unit No. 1
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
C41 C001A	Standby Liquid Control	2	1. Inlet pressure	NA	7.1.5
C41 C001B			2. Differential pressure	NA	7.1.5
			3. Flow rate	Every 3 mos.	7.1.2
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	No
			6. Lubricant level or pressure	Every 3 mos.	No
E11 C002A	Residual Heat Removal	2	1. Inlet pressure	Every 3 mos.	No
E11 C002B			2. Differential pressure	Every 3 mos.	No
E11 C002C			3. Flow rate	Every 3 mos.	No
E11 C002D			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	7.1.1
			6. Lubricant level or pressure	Every 3 mos.	7.1.4

Plant Hatch - Unit No. 1
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
E11 C001A	RHR Service Water	3	1. Inlet pressure	Every 3 mos.	7.1.3
E11 C001B			2. Differential pressure	Every 3 mos.	7.1.3
E11 C001C			3. Flow rate	Every 3 mos.	No
E11 C001D			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	7.1.1
			6. Lubricant level or pressure	Every 3 mos.	7.1.4
E21 C001A	Core Spray	2	1. Inlet pressure	Every 3 mos.	No
E21 C001B			2. Differential pressure	Every 3 mos.	No
			3. Flow rate	Every 3 mos.	No
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	7.1.1
			6. Lubricant level or pressure	Every 3 mos.	7.1.4

Plant Hatch - Unit No. 1
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
E21 C002A	Jockey pump	2	1. Inlet pressure	Every 3 mos.	No
E21 C002B			2. Differential pressure	Every 3 mos.	No
			3. Flow rate	NA	7.1.7
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	No
			6. Lubricant level or pressure	NA	7.1.6
P41 C001A	Plant service water	3	1. Inlet pressure	Every 3 mos.	7.1.3
P41 C001B			2. Differential pressure	Every 3 mos.	7.1.3
P41 C001C			3. Flow rate	Every 3 mos.	No
P41 C001D			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	7.1.1
			6. Lubricant level or pressure	Every 3 mos.	7.1.4

Plant Hatch - Unit No. 1
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
E41 C001	High-pressure Coolant Injection	3	1. Inlet pressure	Every 3 mos.	No
			2. Differential pressure	Every 3 mos.	No
			3. Flow rate	Every 3 mos.	No
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	No
			6. Lubricant level or pressure	Every 3 mos.	No
			7. Pump speed	Every 3 mos.	No
E51 C001	Reactor Core Isolation Cooling	2	1. Inlet pressure	Every 3 mos.	No
			2. Differential pressure	Every 3 mos.	No
			3. Flow rate	Every 3 mos.	No
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	No
			6. Lubricant level or pressure	Every 3 mos.	No
			7. Pump speed	Every 3 mos.	No

Plant Hatch - Unit No. 2
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
2C41 C001A	Standby Liquid Control	2	1. Inlet pressure	NA	7.1.5
2C41 C001B			2. Differential pressure	NA	7.1.5
			3. Flow rate	Every 3 mos.	7.1.2
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	No
			6. Lubricant level or pressure	Every 3 mos.	No
2E11 C002A	Residual Heat Removal	2	1. Inlet pressure	Every 3 mos.	No
2E11 C002B			2. Differential pressure	Every 3 mos.	No
2E11 C002C			3. Flow rate	Every 3 mos.	No
2E11 C002D			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	7.1.1
			6. Lubricant level or pressure	Every 3 mos.	7.1.4

Plant Hatch - Unit No. 2
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
2E11 C001A	RHR Service Water	3	1. Inlet pressure	Every 3 mos.	7.1.3
2E11 C001B			2. Differential pressure	Every 3 mos.	7.1.3
2E11 C001C			3. Flow rate	Every 3 mos.	No
2E11 C001D			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	7.1.1
			6. Lubricant level or pressure	Every 3 mos.	7.1.4
2E21 C001A	Core Spray	2	1. Inlet pressure	Every 3 mos.	No
2E21 C001B			2. Differential pressure	Every 3 mos.	No
			3. Flow rate	Every 3 mos.	No
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	7.1.1
			6. Lubricant level or pressure	Every 3 mos.	7.1.4

Plant Hatch - Unit No. 2
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
2E21 C002A	Jockey pump	2	1. Inlet pressure	Every 3 mos.	No
2E21 C002B			2. Differential pressure	Every 3 mos.	No
2E21 C003A			3. Flow rate	NA	7.1.7
2E21 C003B			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	No
			6. Lubricant level or pressure	Every 3 mos.	No
2P41 C001A	Plant service water	3	1. Inlet pressure	Every 3 mos.	7.1.3
2P41 C001B			2. Differential pressure	Every 3 mos.	7.1.3
2P41 C001C			3. Flow rate	Every 3 mos.	No
2P41 C001D			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	7.1.1
			6. Lubricant level or pressure	Every 3 mos.	7.1.4

Plant Hatch - Unit No. 2
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
2P41-C002	Standby Diesel Gen. Service Water	2	1. Inlet pressure	Every 3 mos.	7.1.3
			2. Differential pressure	Every 3 mos.	7.1.3
			3. Flow rate	Every 3 mos.	
			4. Vibration amplitude	Every 3 mos.	
			5. Bearing temperature	Annually	
			6. Lubricant Level or pressure	NA	7.1.6
2E41 C001	High Pressure Coolant Injection	2	1. Inlet pressure	Every 3 mos.	No
			2. Differential pressure	Every 3 mos.	No
			3. Flow rate	Every 3 mos.	No
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	No
			6. Lubricant level or pressure	Every 3 mos.	No
			7. Pump speed	Every 3 mos.	No

Plant Hatch - Unit No. 2
Inservice Inspection Program for
ASME Code Class 1, 2, and 3 Pumps

<u>Pump Identification</u>	<u>Pump Description</u>	<u>ASME Code Class</u>	<u>Measured Parameters</u>	<u>Test Interval</u>	<u>Section XI Code Relief Requested</u>
2E51 C001	Reactor Core Isolation Cooling	2	1. Inlet pressure	Every 3 mos.	No
			2. Differential pressure	Every 3 mos.	No
			3. Flow rate	Every 3 mos.	No
			4. Vibration amplitude	Every 3 mos.	No
			5. Bearing temperature	Annually	No
			6. Lubricant level or pressure	Every 3 mos.	No
			7. Pump speed	Every 3 mos.	No