



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

November 9, 2022

Mr. Jim Barstow  
Vice President Nuclear Regulatory  
Affairs & Support Services  
Tennessee Valley Authority  
1101 Market Street, LP 4A-C  
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT – INTEGRATED INSPECTION REPORT  
05000259/2022003, 05000260/2022003 AND 05000296/2022003

Dear Mr. Barstow:

On September 30, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Browns Ferry Nuclear Plant. On November 3, 2022, the NRC inspectors discussed the results of this inspection with Mr. Manu Sivaraman and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

A handwritten signature in cursive script that reads "Wesley Deschaine".

Signed by Deschaine, Wesley  
on 11/09/22

Wesley D. Deschaine, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Docket Nos. 05000259, 05000260  
and 05000296  
License Nos. DPR-33, DPR-52,  
and DPR-68

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: BROWNS FERRY NUCLEAR PLANT – INTEGRATED INSPECTION REPORT  
05000259/2022003, 05000260/2022003 AND 05000296/2022003 – dated  
November 9, 2022

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Numbers: 05000259, 05000260 and 05000296

License Numbers: DPR-33, DPR-52 and DPR-68

Report Numbers: 05000259/2022003, 05000260/2022003 and 05000296/2022003

Enterprise Identifier: I-2022-003-0013

Licensee: Tennessee Valley Authority

Facility: Browns Ferry Nuclear Plant

Location: Athens, Alabama

Inspection Dates: July 01, 2022 to September 30, 2022

Inspectors: N. Karlovich, Resident Inspector  
M. Kirk, Resident Inspector  
M. Meeks, Senior Operations Engineer  
N. Peterka, Fuel Facility Inspector  
K. Pfeil, Resident Inspector  
J. Steward, Senior Resident Inspector  
J. Viera, Senior Operations Engineer

Approved By: Wesley D. Deschaine, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Browns Ferry Nuclear Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### List of Findings and Violations

No findings or violations of more than minor significance were identified.

### Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
URI	05000259/2022003-01	Browns Ferry Unit 1 High Pressure Coolant Injection (HPCI) Inoperable on July 12, 2022	71152S	Open

## **PLANT STATUS**

Unit 1 began the inspection period in Mode 1, 100 percent (full) rated thermal power (RTP). On July 6, 2022, the Unit down powered to 77 percent RTP in order to comply with the State of Alabama National Pollutant Discharge Elimination (NPDES) Permit which limits the temperature of heated effluent from the plant such that the 24-hour average downstream plant-induced water temperature should not exceed 90 degrees F. On July 7, 2022, downstream plant-induced water temperature was maintained such that Unit 1 returned to 100 percent RTP. On July 8, 2022, Unit 1 down powered to 51 percent RTP in order to comply with NPDES 24-hour average downstream plant-induced water temperature requirements and returned to full RTP on July 10, 2022. On July 11, 2022, Unit 1 down powered to 70 percent RTP for a control rod pattern adjustment and returned to full RTP on July 12, 2022. On August 22, 2022, Unit 1 commenced coast down in power in anticipation of a planned refueling outage (1R14). On September 1, 2022, reactor recirculation pump 1A tripped due to multiple power cells being bypassed on the 1A variable frequency drive (VFD) which lowered power to 38 percent RTP. On September 5, 2022, following repairs to the VFD power was raised to 95 percent RTP. Unit 1 continued to coast down in power until reactor recirculation pump 1B tripped due to multiple power cells being bypassed on the 1B VFD on September 28, 2022, which lowered power from 83 percent RTP to approximately 40 percent RTP. Unit 1 remained at 40 percent power until the unit was shutdown on September 30, 2022, at 2100 for the 1R14 refueling outage, where it remained through the end of the inspection period.

Unit 2 began the inspection period at full RTP. On September 15, 2022, Unit 2 performed a planned down power to 62 percent RTP for testing of the turbine control valve and then returned to full RTP where it remained through the end of the inspection period.

Unit 3 began the inspection period at full RTP. On July 8, 2022, Unit 3 down powered to 78 percent RTP in order to comply with NPDES 24-hour average downstream plant-induced water temperature requirements and returned to full RTP on July 9, 2022. On August 26, 2022, Unit 3 down powered to 65 percent RTP for a planned control rod pattern adjustment. On August 28, 2022, Unit 3 returned to full RTP. On September 6, 2022, Unit 3 down powered to 63 percent RTP for power suppression testing due to indications of damaged fuel. On September 10, 2022, Unit 3 returned to full RTP. On September 23, 2022, Unit 3 down powered to 70 percent for a planned control rod sequence exchange and returned to full RTP on September 24, 2022, where it remained through the end of the inspection period.

## **INSPECTION SCOPES**

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed activities described in IMC 2515, Appendix D, "Plant Status," observed risk significant activities, and completed on-site portions of IPs. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## **REACTOR SAFETY**

### 71111.04 - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Unit 2 Core Spray Loop 1 while Core Spray Loop 2 was under planned maintenance on July 13, 2022
- (2) Unit 2 Residual Heat Removal System (RHR) Loop 2 on September 09, 2022
- (3) Unit 0 "A" Control Bay Chiller pump and Chiller while B Chiller was under planned maintenance on September 15, 2022

#### Complete Walkdown Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated system configurations during a complete walkdown of the Unit 1, 2 and 3 Containment Atmosphere and Dilution (CAD) system on August 17, 2022

### 71111.05 - Fire Protection

#### Fire Area Walkdown and Inspection Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Fire Area 5, Electric board room 1A on August 9, 2022
- (2) Fire Area 18, Unit 2 Battery and battery board room on August 9, 2022
- (3) Fire Area 16, Units 2 and 3 Cable Spreading room B on September 16, 2022

### 71111.06 - Flood Protection Measures

#### Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Unit 3 Emergency Diesel Generator (EDG) Building on June 21-24, 2022, and August 10, 2022

### 71111.11B - Licensed Operator Requalification Program and Licensed Operator Performance

#### Licensed Operator Requalification Program (IP Section 03.04) (1 Sample)

The inspectors reviewed the facility operating history and associated documents in preparation for this inspection. During the week of September 12, 2022, the inspectors reviewed documentation, interviewed licensee personnel, and observed the administration of operating tests associated with the licensee's operator requalification program. Each of the activities performed by the inspectors was done to assess the effectiveness of the facility

licensee in implementing requalification requirements identified in 10 CFR Part 55, "Operators' Licenses." The evaluations were also performed to determine if the licensee effectively implemented operator requalification guidelines established in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and Inspection Procedure (IP) 71111.11, "Licensed Operator Requalification Program." The inspectors also evaluated the licensee's simulation facility for adequacy for use in operator licensing examinations using ANSI/ANS-3.5-1985, "American National Standard for Nuclear Power Plant Simulators for use in Operator Training and Examination." The inspectors observed three crews during the performance of the operating tests. Documentation reviewed included written examinations, Job Performance Measures (JPMs), simulator scenarios, licensee procedures, on-shift records, simulator modification request records, simulator performance test records, operator feedback records, licensed operator qualification records, remediation plans, watchstanding records, and medical records. The records were inspected using the criteria listed in IP 71111.11. Documents reviewed during the inspection are documented in the List of Documents Reviewed.

(1) Biennial Requalification Written Examinations

The inspectors evaluated the quality of the licensed operator biennial requalification written examination administered in 2021.

Annual Requalification Operating Tests

The inspectors evaluated the adequacy of the facility licensee's annual requalification operating test.

Administration of an Annual Requalification Operating Test

The inspectors evaluated the effectiveness of the facility licensee in administering requalification operating tests required by 10 CFR 55.59(a)(2) and that the facility licensee is effectively evaluating their licensed operators for mastery of training objectives.

Requalification Examination Security

The inspectors evaluated the ability of the facility licensee to safeguard examination material, such that the examination is not compromised.

Remedial Training and Re-examinations

The inspectors evaluated the effectiveness of remedial training conducted by the licensee, and reviewed the adequacy of re-examinations for licensed operators who did not pass a required requalification examination.

Operator License Conditions

The inspectors evaluated the licensee's program for ensuring that licensed operators meet the conditions of their licenses.

Control Room Simulator

The inspectors evaluated the adequacy of the facility licensee's control room simulator in modeling the actual plant, and for meeting the requirements contained in 10 CFR 55.46.

#### Problem Identification and Resolution

The inspectors evaluated the licensee's ability to identify and resolve problems associated with licensed operator performance.

### 71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

#### Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the Control Room during the following evolutions:
  - Unit 1 downpower due to river temperature on July 6, 2022
  - Unit 1 removal of extraction steam from feedwater heaters 1A1, 1B1 and 1C1 to implement final feedwater temperature reduction on August 20, 2022
  - Unit 3 downpower to 70 percent RTP and removal of 3A Reactor Feed Pump Turbine from service on August 26, 2022

#### Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated two separate licensed operator requalification training sessions which included a control rod drift, loss of Emergency Equipment Cooling Water (EECW), Safety Relief Valve (SRV) lift, Electro Hydraulic Control (EHC) system leak, high power Anticipatory Transient Without Scram (ATWS), high suppression chamber pressure caused by SRV tailpipe break on the Unit 2 simulator on August 15, 2022, which required the crew to enter various abnormal operating instructions (AOI), emergency operating instructions (EOI) and emergency plan Implementing procedures (EPIP) to control the plant and appropriately classify the emergency.

### 71111.12 - Maintenance Effectiveness

#### Maintenance Effectiveness (IP Section 03.01) (3 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) RHR 1A Heat Exchanger Outlet Valve, 1-FCV-23-34 loss of indication during closure stroke from the main control room and subsequent actuator replacement maintenance activity on August 18, 2022
- (2) Maintenance Rule Periodic Evaluation, 50.65(a)(3) for January 2020 through December 2021 completed on September 21, 2022
- (3) Diesel Exhaust Board 3EB Room Exhaust Fan found tripped, work order 123060605 written and documented maintenance rule functional failure on September 28, 2022



### 71111.13 - Maintenance Risk Assessments and Emergent Work Control

#### Risk Assessment and Management Sample (IP Section 03.01) (1 Sample)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Evaluated risk of various Unit 1, Unit 3 and common protected equipment while EDG A removed from service during planned maintenance on August 2, 2022

### 71111.15 - Operability Determinations and Functionality Assessments

#### Operability Determination or Functionality Assessment (IP Section 03.01) (4 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Unit 2, System 2 Minimum Flow Isolation Valve Operator, 2-MVOP-075-0037 as found close stem factor exceeded acceptance criteria on September 22, 2022
- (2) Unit 1, RHR Loop 1 LPCI outboard injection valve, 1-FCV-074-0052, having a worn bearing found in the gear train on September 23, 2022
- (3) Unit 1, 2, and 3 nitrogen storage tank A fill line safety valve, 0-RFV-084-0503, experiencing excessive leakage during relief valve testing on September 16, 2022
- (4) Unit 1 reactor building equipment access inner door leak failure of 0-TI-408 per CR 1700900 on September 28, 2022

### 71111.19 - Post-Maintenance Testing

#### Post-Maintenance Test Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the following post-maintenance testing activities to verify system operability and/or functionality:

- (1) Unit 1, HPCI turbine control valve, 1-FCV-73-19, after replacement on the electronic governor (EG-R) actuator on July 16, 2022
- (2) Units 1 and 2, A diesel generator (DG) following generator replacement on August 4, 2022
- (3) Unit 0, a battery charger after replacement of the Shutdown Board D 250 V DC Battery Charger on September 22, 2022
- (4) Unit 0, breaker 0-BKR-031-2201A, for the 480V Supply for control bay chilled water pump B, after the breaker was returned from cleaning on September 22, 2022

### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance testing activities to verify system operability and/or functionality:

#### Surveillance Tests (other) (IP Section 03.01) (1 Sample)

- (1) Unit 3 Control Rod Coupling Integrity Check during power suppression testing on September 08, 2022

Inservice Testing (IP Section 03.01) (2 Samples)

- (1) Unit 0 (Common) Residual Heat Removal Service Water (RHRSW) C3 IST Group A Quarterly Pump Test on August 31, 2022
- (2) Unit 0 (Common) Residual Heat Removal Service Water (RHRSW) Pump C1 IST Group A Quarterly Pump Test on September 26, 2022

RCS Leakage Detection Testing (IP Section 03.01) (1 Sample)

- (1) Unit 3, Drywell Floor Drain Leakage Rate rise documented under CR 1795731 which triggered entry on August 9, 2022, into Action Level 3 of Inspection Manual Chapter 2515, Appendix D, Attachment 1

FLEX Testing (IP Section 03.02) (1 Sample)

- (1) Flex Equipment Storage Building (FESB) Inspection and Maintenance on August 30, 2022

71114.06 - Drill Evaluation

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

- (1) The inspectors reviewed and evaluated the emergency response organization drill response during a Unit 2 shutdown Mode 4 scenario that required the facilities to correctly classify the event and notify the required outside organizations within the required timeframes on July 27, 2022.

**OTHER ACTIVITIES – BASELINE**

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS06: Emergency AC Power Systems (IP Section 02.05) (3 Samples)

- (1) Unit 1 (July 1, 2021 - June 30, 2022)
- (2) Unit 2 (July 1, 2021 - June 30, 2022)
- (3) Unit 3 (July 1, 2021 - June 30, 2022)

MS09: Residual Heat Removal Systems (IP Section 02.08) (3 Samples)

- (1) Unit 1 (July 1, 2021 - June 30, 2022)
- (2) Unit 2 (July 1, 2021 - June 30, 2022)
- (3) Unit 3 (July 1, 2021 - June 30, 2022)

MS10: Cooling Water Support Systems (IP Section 02.09) (3 Samples)

- (1) Unit 1 (July 1, 2021 - June 30, 2022)
- (2) Unit 2 (July 1, 2021 - June 30, 2022)
- (3) Unit 3 (July 1, 2021 - June 30, 2022)

71152A - Annual Follow-up Problem Identification and Resolution

Annual Follow-up of Selected Issues (Section 03.03) (2 Samples)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) Corrective actions associated with relay contacts for the Unit 3 3C RHR pump 4kV shutdown board breaker not responding as expected while performing preventative maintenance on August 26, 2022
- (2) Repairs and corrective actions associated with Unit 3 Drywell Pressure High indicator reading high and indicating trip condition due to water intrusion in the pressure transmitter on June 22, 2022

71152S - Semiannual Trend Problem Identification and Resolution

Semiannual Trend Review (Section 03.02) (1 Sample)

- (1) The inspectors reviewed the licensee's corrective action program for potential adverse trends in increasing trend in moisture content in the Unit 1 HPCI turbine oil samples that might be indicative of a more significant safety issue on September 30, 2022

71153 - Follow Up of Events and Notices of Enforcement Discretion

Event Followup (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated unplanned inoperability of Unit 1 HPCI due to the failure of the turbine control valve to open during a surveillance and licensee's response on July 12, 2022

**INSPECTION RESULTS**

Unresolved Item (Open)	Browns Ferry Unit 1 High Pressure Coolant Injection (HPCI) Inoperable on July 12, 2022 URI 05000259/2022003-01	71152S
<u>Description:</u> On July 12, 2022, during the performance of the Browns Ferry (BF) Unit 1 HPCI quarterly flow test, operators started the auxiliary oil pump, but the HPCI governor valve failed to open. The governor valve controls flow of steam to the HPCI pump turbine. With the governor valve closed the HPCI system cannot perform its safety function. The licensee subsequently declared Unit 1 HPCI inoperable at 0954 central time. The Automatic Depressurization System (ADS) and Reactor Core Isolation Cooling (RCIC) systems remained operable. This condition placed the unit into Technical Specification action statement LCO 3.5.1.C, which provides the licensee 14 days to restore HPCI to operation. Following replacement of the EGR (Electronic Governor Remote), remote servo		

and post maintenance testing, HPCI was restored to operable at 0915 on July 15, 2022.

The licensee reported the event to the NRC on July 12, 2022, under event number 55992 as an eight-hour, non-emergency notification per 10 CFR 50.72(b)(3)(v) and submitted a written report as Licensee Event Report (LER) 50-259/2022-002-00, HPCI Inoperable Due to Corroded Actuator on September 12, 2022. The licensee completed a Level 2 Evaluation Report titled, "Unit 1 HPCI Turbine Control Valve Failed to Open" documented under Condition Report (CR) 1789217 on August 17, 2022. HPCI Failure Analysis of the Woodward EGR Actuator, Rev.0 was performed by third party vendor Engine Systems Inc., on August 17, 2022. Revision 1 to the Failure Analysis of the Woodward EGR Actuator was issued on October 3, 2022. The licensee approved a Management Review Committee (MRC) endorsed version of a revision to the Level 2 Evaluation Report titled, "Unit 1 HPCI Turbine Control Valve Failed to Open on October 17, 2022. Issuance of revision 2 to the Failure Analysis of the Woodward EGR Actuator is pending.

An unresolved item (URI) is opened to review the MRC endorsed version of the Level 2 Evaluation and the pending revision 2 of the failure analysis of the Woodward EGR Actuator to determine if there is a performance deficiency and when BF Unit 1 HPCI was inoperable.

Planned Closure Actions: NRC subject matter experts (SMEs) will review the licensee's evaluation of the issue and will document the results in the BF fourth quarter integrated inspection report.

Licensee Actions: On July 21, 2022, scope add 1372 and WO 114560684, "Unit 1 HPCI Gland Seal Leak-off lines need to be routed downward," were added to the outage scope for the 1R14 refueling outage commencing October 1, 2022.

Corrective Action References: CR's 1552443, 1729940, 1789217, 1790363 and WO 114560684

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On November 3, 2022, the inspectors presented the integrated inspection results to Mr. Manu Sivaraman and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04	Drawings	0-47E866-9	Flow Diagram Chilled Water Circulating Pumps	Rev 14
		1-47E862-1	Units 1 and 0 Flow Diagram Containment Atmosphere Dilution System	Rev 27
		1-OI-84-ATT-2A	Containment Atmosphere Dilution System Panel Lineup Checklist	Rev 8
		2-47E811-1	Flow Diagram Residual Heat Removal System	Rev 77
		2-47E814-1	Flow Diagram Core Spray System	Rev 56
		3-47E862-1	Unit 3 Flow Diagram Containment Atmosphere Dilution System	Rev 32
	Procedures	0-OI-31	Control Bay and Off-Gas Treatment Building Air Conditioning System	Rev 172
		0-OI-31/ATT-1	Valve Lineup Checklist	Rev 137
		0-OI-31/ATT-2	Panel Lineup Checklist	Rev 136
		0-OI-31/ATT-3	Electrical Lineup Checklist	Rev 137
		0-OI-31/ATT-4	Instrument Inspection Checklist	Rev 137
		1-OI-84/ATT-1A	Containment Atmosphere Dilution System Valve Lineup Checklist	Rev 10
		2-OI-75	Core Spray System	Rev 120
		2-OI-75/ATT-1	Core Spray System Valve Lineup Checklist	Rev 106
		2-OI-75/ATT-2	Panel Lineup Checklist Unit 2	Rev 107
		2-OI-75/ATT-3	Cores Spray System Electrical Lineup Checklist	Rev 106
		2-OI-75/ATT-4	Core Spray System Instrument Inspection Checklist	Rev 105
		2-OI-84/ATT-1	Containment Atmosphere Dilution System Valve Lineup Checklist	Rev 51
		3-OI-84/ATT-1A	Containment Atmosphere Dilution System Valve Lineup Checklist	Rev 31
		3-OI-84/ATT-2A	Containment Atmosphere Dilution System Panel Lineup Checklist	Rev 29
71111.05	Drawings	0-47E216-106	Ignition Source Drawings Plan El. 606.0 and 621.25	Rev 3
		0-47E216-70	NFPA 805 Fire Areas Plan El. 617.0 and 621.25	Rev 1
	Fire Plans		NFPA 805 Fire Protection Report - Appendix F, Fire Safety Analysis	Rev 0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		FPR-Volume 2	Fire Protection Report Volume 2	Rev 73
		NFPA 805 Protection Report	Appendix F Fire Area 16	Rev 5
71111.06	Calculations	MDQ00004020110008	Flow Capacity of the Diesel Generator Building Emergency Drain Piping	Rev 1
		NDN00099920070031	BFN Probabilistic Risk Assessment - Internal Flooding Analysis	Rev 3
	Drawings	0-47E851-4	Flow Diagram Drainage	Rev 18
	Procedures	0-OI-40	Station Drainage System	Rev 37
		3-ARP-9-7C	Panel 9-7 3-XA-55-7C	
71111.11B	Corrective Action Documents	Condition Reports	1728394; 1738904; 1759998; 1627098; 1683693; 1692069; 1694927	
	Miscellaneous	JPM 0AREP20APTC	Hazards - Hostile Action within the Protected Area (HS1) without Vaporstream	Rev 0
		JPM 0AREP22APTC	HAZARDS - HOSTILE ACTION within the OWNER CONTROLLED AREA or airborne attack threat within 30 minutes - without Vaporstream	Rev 0
		JPM 11PAOI06AP	Actions outside Control Room to attempt to close Unit 1 MSRV 1-18 per 1-AOI-1-1	Rev 0
		JPM 11PEO108	EOI Appendix 16L - Bypassing High Temperature Isolation	Rev 1
		JPM 11PFSS38	Perform 1-FSS-16.2, Attachment 10, Section 2, Step C to align Panel 25-31 for RCIC Operation at the Backup Control Panel	Rev 0
		JPM 2IPEOI06	EOI Appendix 16H - Bypassing RCIC High RPV Water Level Shutdown Interlocks	Rev 7
		JPM 2SAOI10AP	Respond to Single Recirc Pump Trip in Mode 1	Rev 3
		JPM 2SEOI20	Align Shutdown Cooling from Unit 3 in accordance with 2-EOI Appendix 17E	Rev 0
		JPM 3IPFSS20	Align 4KV Shutdown Board 3EA to Diesel Generator 3A per 3-FSS-16-2, Attachment 6, Section 3.0	Rev 0
		JPM 3SEOI22AP	3-EOI Appendix 17F, RHR Fails, use Loop II Core Spray	Rev 0
		Medical Records	Medical Records reviewed for twelve licensed operators	
		Remediation Records	Five (5) Remedial Training Records (Individual and	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Crews) from 2-year Training Cycle	
		SEG# LOR-EXAM-26	Simulator Scenario LOR-EXAM-26	Rev #07
		SEG# LOR-EXAM-77	Simulator Scenario LOR-EXAM-77	Rev #3
		SEG# LOR-EXAM-78A	Simulator Scenario LOR-EXAM-78A	Rev #0
		SEG# LOR-EXAM-84	Simulator Scenario LOR-EXAM-84	Rev #00
		Simulator Testing	Steady State Test, 74%, 11-29-2021; Steady State Test, 50%, 7-11-2022; Malfunction Test, FW30, 7-7-2022; Malfunction Test, RD06, 7-10-2022; Malfunction Test, TC01, 7-10-2022; Transient Test, 2021 #2, 11-2-2021; Transient Test, 2021 #5, 11-2-2021; Transient Test, 2022 #3, 6-27-2022; Transient Test, 2022 #7, 6-2-2022; Transient Test, 2022 #8, 6-2-2022	
Written Examination	2021 NRC Biennial Examinations, RO and SRO Examination 3			
71111.11Q	Miscellaneous	OPL1755494	Control Rod Drift/Loss of EECW/SRV Lift/EHC Leak/ATWS EOI-1A/ High SC Pressure/EOI-2	Rev 0
	Procedures	1-GOI-100-12	Power Maneuvering	Rev 20
		1-OI-6	Feedwater Heating and Misc Drains System	Rev 44
71111.12	Corrective Action Documents	1794453		08/18/2022
		1794821, 1791930		09/28/2022
	Self-Assessments	R40 220224 179	Maintenance Rule 13th Periodic Report January 2020 to December 2021	Rev 0
	Work Orders	123060605		09/28/2022
		123091734		08/18/2022
71111.15	Calculations	MDQ2075910144		Rev 6
	Corrective Action Documents	CR 1222334827		
		CR 1790852, 1711939		
	Operability Evaluations	CR 1789337		09/22/2022
	Procedures	0-TI-408	Equipment Air Lock Door Seal Pressure Decay Test	Rev 11
		NEDP-22	Operability Determinations and Functional Evaluations	Rev 23
		OPDP-8	Operability Determination Process and Limiting Conditions for Operation Tracking	Rev 29

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders	122245070		09/22/2022
		WO 119853968, 121509559		
71111.19	Drawings	1-47E812-1	Flow Diagram High Pressure Coolant Injection System	Rev 48
		1-47E812-2	Flow Diagram HPCI Oil System	Rev 5
	Miscellaneous	BFN-VTD-W290-0030	Installation and Operation of Woodward EG-3C AND EG-R Actuators	Rev 1
	Procedures	1-SR-3.5.1.7	HPCI Main and Booster Pump Set Developed Head and Flow Rate Test at Rated Reactor Pressure	Rev 45
		MCI-0-082-ENG014	Standby Diesel Engine Generator Removal and Reinstallation	Rev 22
		MPI-0-073-TRB001	High Pressure Coolant Injection (HPCI) Turbine Preventative Maintenance	Rev 58
	Work Orders	WO 122110966, 122405721		
		WO 122190143, 123038729, 123038489, 122196374		
71111.20	Procedures	1-GOI-100-12	Power Maneuvering	Rev 20
		1-GOI-100-12A	Unit Shutdown from Power Operation to Cold Shutdown and Reductions in Power During Power Operations	Rev 38
		1-OI-69	Reactor Water Cleanup System	Rev 86
71111.22	Miscellaneous	79847	Preventive Maintenance Job Plan	Rev 2
		ODMI	Operational Decision Making Issue Evaluation Document on increasing Unit 3 Drywell Unidentified Leakage	08/19/2022
	Procedures	0-SI-4.5.C.1(C1)	RHRSW Pump C1 IST Group A Quarterly Pump Test	Rev 12
		0-SI-4.5.C.1(C3)	RHRSW Pump C3 IST Group A Quarterly Pump Test	Rev 19
	Work Orders	122344501		08/30/2022
71151	Engineering Evaluations	R40210928088	Unit 2 MSPI Basis Document	Rev 20
		R40210928089	Unit 3 MSPI Basis Document	Rev 20
		R4021098087	Unit 1 MSPI Basis Document	Rev 21
71152A	Corrective Action	CR 1785291,		



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents	1801867, 1785140		
		CR 1798886, 1799518		
	Work Orders	WO 122163858		
		WO 123183883, 123001232		
71152S	Corrective Action Documents	552443, 1729940, 1789217 and 1790363		10/17/2022
	Miscellaneous	1372	Scope add	10/17/2022
	Work Orders	114560684		10/17/2022