UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

April 23, 2020

Mr. Brad Sawatzke
Chief Executive Officer
Energy Northwest
MD 1023
P.O. Box 968
Richland, WA 99352-0968

SUBJECT: COLUMBIA GENERATING STATION – INTEGRATED INSPECTION REPORT 05000397/2020001

Dear Mr. Sawatzke:

On March 31, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Columbia Generating Station. On April 9, 2020, the NRC inspectors discussed the results of this inspection with Mr. W. Grover Hettel, Chief Nuclear Officer/Vice President Nuclear Generation, and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement; and the NRC Resident Inspector at Columbia Generating Station.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; and the NRC Resident Inspector at Columbia Generating Station.

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,

Jeffrey E. Josey, Chief
Reactor Projects Branch A
Division of Reactor Projects

Docket No. 05000397
License No. NPF-21

Enclosure:
As stated

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COLUMBIA GENERATING STATION – INTEGRATED INSPECTION
REPORT 05000397/2020001 – April 23, 2020

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number:	05000397
License Number:	NPF-21
Report Number:	05000397/2020001
Enterprise Identifier:	I-2020-001-0011
Licensee:	Energy Northwest
Facility:	Columbia Generating Station
Location:	Richland, WA
Inspection Dates:	January 1 to March 31, 2020
Inspectors:	G. Kolcum, Senior Resident Inspector L. Merker, Resident Inspector R. Alexander, Senior Emergency Preparedness Inspector
Approved By:	Jeffrey E. Josey, Chief Reactor Projects Branch A 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 Columbia Generating Station, 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

Standby Service Water Low Flow for Room Cooler			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000397/2020001-01 Open/Closed	[H.11] - Challenge the Unknown	71111.15
The inspectors reviewed a self-revealed, Green, non-cited violation of Technical Specification 5.4.1.a, for the licensee's failure to perform maintenance in accordance with documented procedures. Specifically, on January 8, 2020, during the performance of required flushing and flow restoration following maintenance under Work Order 0213980 for a safety-related room cooler for a 480 V motor control center, the standby service water valve was positioned incorrectly, contrary to Procedure OSP-SW-M101, "Standby Service Water Loop A Valve Position Verification," Revision 41, which states to not exceed seven turns closed. When standby service water pump A was started on January 12, 2020, a low flow alarm was received for the room cooler.			

Additional Tracking Items

None.

PLANT STATUS

The reactor unit began the inspection period at rated thermal power. On January 14, 2020, plant power was reduced to 93 percent due to a failure on an adjustable speed drive. On January 16, 2020, plant power was reduced to 73 percent to recover the adjustable speed drive before returning to 100 percent.

On February 14, 2020, plant power was reduced to 39 percent due to a trip of reactor recirculation pump 1A. On February 15, 2020, the plant was stabilized at 48 percent power before reducing to 28 percent to attempt a restart of reactor recirculation pump 1A. On February 16, 2020, the plant was stabilized at 48 percent before reducing to 28 percent to attempt a second restart of reactor recirculation pump 1A. On February 17, 2020, the plant was stabilized at 48 percent. On February 18, 2020, the plant was reduced to 28 percent for a third attempt to restart reactor recirculation pump 1A before returning to 48 percent. On February 19, 2020, the plant was reduced to 29 percent to restart reactor recirculation pump 1A with modified control software settings before returning to 100 percent. On February 24, 2020, plant power was reduced to 98 percent due to a high level trip of feedwater heaters 4A and 4C. On February 25, 2020, plant power was lowered to 81 percent to recover feedwater heaters. Feedwater heaters 4A and C were recovered on February 26, 2020, and the unit returned to 100 percent power.

On March 6, 2020, plant power was reduced to 80 percent due to a high level trip of feedwater heater 1C with subsequent trips of feedwater heaters 2A, 2B, 2C, and 3C. On March 7, 2020, plant power was reduced to 75 percent for restoration of the feedwater heaters. On March 8, 2020, the reactor was returned to 100 percent power. On March 14, 2020, plant power was reduced to 78 percent to perform a control rod sequence exchange and bypass valve testing. Reactor power returned to 100 percent rated power on the same day where it remained at full power through the remainder 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 plant status activities described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution." 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.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time the resident inspectors performed periodic site visits each week and during that time conducted plant status activities as described in IMC 2515, Appendix D; and observed risk significant activities when warranted. In addition, resident and regional baseline inspections were evaluated to determine if all or portions of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be

performed remotely, they were conducted per the applicable IP. In the cases where it was determined the objectives and requirements could not be performed remotely, management elected to postpone and reschedule the inspection to a later date.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated the adequacy of the overall preparations to protect risk-significant systems from severe cold weather, snow, and wind advisory; week of January 13, 2020.

Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated the adequacy of the overall preparations to protect risk-significant systems from impending afternoon high wind warning on February 23, 2020.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (5 Samples)

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

(1) standby service water system A on January 6, 2020
(2) diesel generator 3 following annual and 12-year system maintenance on February 6, 2020
(3) recirculation pump 1A startup on February 19, 2020
(4) reactor core isolation cooling system on March 11, 2020
(5) diesel generator 2 following maintenance on March 17, 2020

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

(1) The inspectors evaluated system configurations during a complete walkdown of the hardened containment vent system installed in accordance with NRC Order EA-13-109 on March 9, 2020. [Completion of this sample was in accordance with the guidance in Temporary Instruction 2515/193, with credit taken in IP 71111.04 - further details are documented in Inspection Report 05000397/2020010, ADAMS Accession No. ML20085F489.]

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (5 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 R-7/1, residual heat removal pump 2C room, on January 23, 2020
(2) Fire Area RC-13/2, chiller room, on February 26, 2020
(3) Fire Area RC-11/1, heating, ventilation, and air conditioning equipment room A, on February 26, 2020
(4) Fire Area RC-12/2, heating, ventilation, and air conditioning equipment room B, on February 26, 2020
(5) Fire Area R-6/2, reactor core isolation cooling pump room, on March 11, 2020

71111.06 - Flood Protection Measures

Cable Degradation (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated cable submergence protection in the protected area, manholes E-MH-E10 and E-MH-E11, on March 26, 2020.

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 yellow risk for the standby service water system A pump run on January 8, 2020.

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

(1) The inspectors observed and evaluated a licensed operator requalification training drill (Crew D) on February 27, 2020.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (2 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) diesel generator 3 maintenance on January 31, 2020
(2) adjustable speed drive system following trip of reactor recirculation pump 1A on February 19, 2020

Quality Control (IP Section 03.02) (1 Sample)

The inspectors evaluated the effectiveness of maintenance and quality control activities to ensure the following SSC remains capable of performing its intended function:

(1) diesel generator 3 maintenance on January 31, 2020

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (5 Samples)

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) yellow risk for standby service water system A maintenance, week of January 6, 2020
(2) yellow risk for diesel generator 3 maintenance on January 30, 2020
(3) yellow risk for a feedwater pump in idle during loss of recirculation pump 1A on February 19, 2020
(4) yellow risk for reactor core isolation cooling system maintenance on March 9, 2020
(5) yellow risk during diesel generator 2 pre-start checks (bar over) on March 19, 2020

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) valve issue in standby service water system A on January 8, 2020
(2) low standby service water system A flow on January 12, 2020
(3) main steam line D high flow switch found out of tolerance on February 21, 2020
(4) residual heat removal system B and C keepfill pump discovery of metal flakes in oil on March 18, 2020

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (3 Samples)

The inspectors evaluated the following temporary or permanent modifications:

(1) revision to correct Procedure SOP-DG-DSA, Diesel Starting Air Operations, to open diesel starting air cross connect valve during maintenance on February 26, 2020
(2) hardened containment vent system installed in accordance with NRC Order EA-13-109 on March 10, 2020. [Completion of this permanent modification sample was in accordance with the guidance in Temporary Instruction 2515/193, with credit taken in IP 71111.18 - further details are documented in Inspection Report 05000397/2020010, ADAMS Accession No. ML20085F489.]
(3) replacement of obsolete pressure regulating assemblies in the diesel generator 3 starting air system on March 23, 2020

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (6 Samples)

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

(1) standby service water system A pump on January 8, 2020
(2) control room emergency chiller A on January 22, 2020
(3) diesel generator 3 annual and 12-year preventive maintenance on February 6, 2020
(4) standby liquid control system flow controller on February 18, 2020
(5) seismic circuit diagnostics on February 27, 2020
(6) main control room cooler 52A on March 13, 2020

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (5 Samples)

(1) OSP-ELEC-M701, diesel generator 1 monthly operability, on January 8, 2020
(2) ISP-MS-B608, response time testing of reactor protection system channel B1 trip on main steam isolation valve closure signal, on February 5, 2020
(3) OSP-LPCS/IST-Q702, low pressure core spray system operability, on February 11, 2020
(4) SOP-APRM/LPRM-OPS, average power range monitoring and local power range monitoring system operability, on February 19, 2020
(5) OSP-ELEC-M702, diesel generator 2 monthly operability, on March 19, 2020

Inservice Testing (IP Section 03.01) (1 Sample)

(1) OSP-RHR/IST-Q702, residual heat removal system A operability, on February 14, 2020

FLEX Testing (IP Section 03.02) (1 Sample)

(1) OSP-FLEX-A102, B5B pumper truck functionality, on February 27, 2020

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

(1) The inspectors evaluated the Columbia Generating Station Emergency Plan, Revision 67, on March 22, 2020. The licensee implemented Revision 67 on March 12, 2020, and submitted the revised emergency plan to the NRC on the same date. This evaluation does not constitute NRC approval.

71114.06 - Drill Evaluation

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

The inspectors evaluated:

(1) general emergency preparedness drill, Team D, on February 25, 2020

71114.08 - Exercise Evaluation Scenario Review

Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

(1) The inspectors reviewed the licensee's preliminary exercise scenario, which was submitted to the NRC on January 21, 2020, for the exercise which was scheduled to occur at the end of March 2020. The inspectors discussed the preliminary scenario with Mr. S.M. Sullivan, Manager, Emergency Preparedness, and other members of the EP staff on February 19, 2020. The inspectors' review does not constitute NRC approval of the scenario. [Subsequent to the scenario discussion, due to events surrounding the COVID-19 public health crisis, the licensee and offsite response organizations postponed the scheduled biennial exercise to a date later in 2020. However, the scenario has been retained and securely controlled, such that it may be utilized when the exercise is conducted later in 2020.]

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 02.01) (1 Sample)

(1) (01/01/2019–12/31/2019)

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 02.02) (1 Sample)

(1) (01/01/2019–12/31/2019)

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 02.03) (1 Sample)

(1) (01/01/2019–12/31/2019)

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

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

(1) classification of safety-related components coded as run to maintenance per the maintenance rule on March 24, 2020

71153 – Follow-up of Events and Notices of Enforcement Discretion

Personnel Performance (IP Section 03.03) (2 Samples)

(1) The inspectors evaluated a failure on an adjustable speed drive, resultant reactor downpower to 93 percent, and the licensee's response on January 16, 2020.
(2) The inspectors evaluated a trip of reactor recirculation pump 1A, resultant reactor downpower to 39 percent, and the licensee's response on February 15, 2020.

INSPECTION RESULTS

Standby Service Water Low Flow for Room Cooler			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000397/2020001-01 Open/Closed	[H.11] - Challenge the Unknown	71111.15

The inspectors reviewed a self-revealed, Green, non-cited violation of Technical Specification 5.4.1.a, for the licensee's failure to perform maintenance in accordance with documented procedures. Specifically, on January 8, 2020, during the performance of required flushing and flow restoration following maintenance under Work Order (WO) 0213980 for a safety-related room cooler for a 480 V motor control center, the standby service water valve was positioned incorrectly, contrary to Procedure OSP-SW-M101, "Standby Service Water Loop A Valve Position Verification," Revision 41, which states to not exceed seven turns closed. When standby service water pump A was started on January 12, 2020, a low flow alarm was received for the room cooler.

Description: On January 8, 2020, during the performance of required flushing and flow restoration following maintenance under WO 0213980 for a safety-related room cooler for a 480 V motor control center, standby service water valve SW-V-115 was positioned incorrectly. Procedure OSP-SW-M101, "Standby Service Water Loop A Valve Position Verification, Revision 41, requires in step 7.2.21.c to "not to exceed 7 TURNS CLOSED." Operators contacted the control room and the shift manager gave permission to throttle the valve beyond seven turns, without reviewing the notes in OSP-SW-M101. The procedure was not annotated by the crew to document the deviation from step 7.2.21.c, and an action request was not initiated for engineering to evaluate the new condition. On January 12, 2020, service water pump A was started and a low flow alarm was received at 4 gpm. Procedure OSP-SW-M101 required 12-15 gpm. Procedure OSP-SW-M101 required a minimum operability flow of 10 gpm. Engineering conducted a review of calculation ME-02-92-43, "Room Temperature Calculation for DG Building, Reactor Building, Radwaste Building and Service Water," Revision 13, and the basis for the 10 gpm. Engineering re-performed the analysis and determined that the value of 4 gpm provided sufficient margin for operability. Operations reviewed the procedure and determined the 'operability limits' stated in the procedure are 'administrative limits' and should be changed.

Corrective Actions: The licensee's corrective actions included immediately declaring the 480 V motor control center room inoperable in accordance with Technical Specification 3.8.7.A when the 480 V motor control center room cooler low flow alarm was received. The licensee entered Procedure OSP-SW-C101, "Service Water Loop A Heat Exchanger Flushing," Revision 0, to adjust flow. In approximately one and a half hours, the adjusted flow was re-tested and the 480 V motor control center was declared operable.

Corrective Action References: Action Request 403084

Performance Assessment:

Performance Deficiency: The licensee's failure to perform maintenance in accordance with documented procedures was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the configuration control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, on January 8, 2020, during the performance of required flushing and flow restoration following maintenance under WO 0213980 for a safety-related room cooler for a 480 V motor control center, the standby service water valve was positioned incorrectly, contrary to Procedure OSP-SW-M101, "Standby Service Water Loop A Valve Position Verification," Revision 41, which states to not exceed seven turns closed. When standby service water pump A was started on January 12, 2020, a low flow alarm was received for the room cooler.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined the finding was of very low safety significance (Green) because all of the screening questions were answered in the negative.

Cross-Cutting Aspect: H.11 - Challenge the Unknown: Individuals stop when faced with uncertain conditions. Risks are evaluated and managed before proceeding. This finding had a cross-cutting aspect in the area of human performance, challenge the unknown, in that the licensee did not stop when faced with uncertain conditions and evaluate and manage risks before proceeding. Specifically, the licensee did not challenge the fact that the procedure did not allow them to close the valve more than seven turns.

Enforcement:

Violation: Technical Specification 5.4.1.a requires, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2. Section 9.a of Appendix A of Regulatory Guide 1.33, Revision 2, requires, in part, that maintenance that can affect the performance of safety-related equipment should be performed in accordance with documented instructions appropriate to the circumstances. The licensee established WO 0213980016 to implement Procedure OSP-SW-M101, "Standby Service Water Loop A Valve Position Verification," Revision 41, to meet the Regulatory Guide 1.33 requirement. The notes preceding step 7.2.21.c of Procedure OSP-SW-M101 state, "The recommended throttled position for SW-V-115 is 6.5 to 6.75 turns closed. The expected flow indication on SW-FI-60 will remain off scale high after performing the next step." Further, step 7.2.21.c states, in part, "Slowly throttle closed SW-V-115...not to exceed 7 TURNS CLOSED."

Contrary to the above, on January 8, 2020, the licensee failed to perform maintenance in accordance with documented instructions appropriate to the circumstances. Specifically, on January 8, 2020, during the performance of required flushing and flow restoration following maintenance under WO 0213980 for a safety-related room cooler for a 480 V motor control center, standby service water valve SW-V-115 was positioned incorrectly in that it exceeded greater than seven turns closed, contrary to Procedure OSP-SW-M101, "Standby Service Water Loop A Valve Position Verification," Revision 41. When standby service water pump A was started on January 12, 2020, a low flow alarm was received for the room cooler.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

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

- On February 19, 2020, the inspectors presented the Emergency Preparedness exit briefing for Emergency Plan revision in-office inspection results to Mr. S. M. Sullivan, Manager, Emergency Preparedness, and other members of the licensee staff.
- On April 9, 2020, the inspectors presented the integrated inspection results to Mr. W Grover Hettel, Chief Nuclear Officer/Vice President Nuclear Generation, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Procedures	ABN-WIND	Tornado/High Winds	032
		SOP-COLDWEATHER-OPS	Cold Weather Operations	034
71111.04	Drawings	M512-1	Flow Diagram: Diesel Oil and Miscellaneous Systems Diesel Generator Building	047
		M587	General Arrangement Plan & Section Diesel Generator Building	040
		M778	Composite Piping Sections & Details Diesel Generator Bldg	040
	Procedures	OSP-SW/IST-Q701	Standby Service Water Loop A Operability	032
		SOP-DG-DCW	Emergency Diesel Generator Jacket Water Cooling	014
		SOP-DG-DSA	Diesel Starting Air Operations	016
		SOP-DG2-LU	Emergency Diesel Generator (DIV 2) Valve and Power Supply Lineup	007
		SOP-DG2-START	Emergency Diesel Generator (DIV 2) Start	032
		SOP-DG2-STBY	High Pressure Core Spray Diesel Generator Standby Lineup	019
		SOP-DG3-LU	High Pressure Core Spray Diesel Generator Valve and Power Supply Lineup	009
		SOP-DG3-START	High Pressure Core Spray Diesel Generator Start	029
		SOP-DG3-STBY	High Pressure Core Spray Diesel Generator Standby Lineup	019
		SOP-RCC-START	RCC System Startup	003
		SOP-RCIC-DRAIN	RCIC Drain	004
		SOP-RCIC-FILL	RCIC Fill and Vent	019
		SOP-RCIC-INJECTION	RCIC RPV Injection	010
		SOP-RCIC-INJECTION-QC	RCIC RPV Injection - Quick Card	008
		SOP-RCIC-LU	RCIC Valve and Breaker Lineup	004
		SOP-RCIC-OIL	RCIC Turbine or Pump Oil Fill and Prime	010

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		SOP-RCIC-SHUTDOWN	RCIC Shutdown	010
		SOP-RCIC-START	RCIC Start in Test Return Mode	006
		SOP-RCIC-STBY	Placing RCIC in Standby Status	012
		SOP-RCIC-SUCTION	RCIC Suction Transfer	001
		SOP-RCIC-TRANSFER-QC	RCIC Transfer to CST - CST Mode	001
		SOP-RRC-ASD	Reactor Recirculation ASD Operation	013
		SOP-RRC-FLOW-QC	Reactor Power Change with RRC Flow Controllers - Quick Card	005
		SOP-RRC-RESTART-QC	Reactor Recirculation Pump Restart - QC	000
		SOP-RRC-SINGLELOOP	Reactor Recirculation Single Loop Operation	014
		SOP-RRC-START	Reactor Recirculation System Start	021
	Work Orders		02182368, 02066997, 02087948, 02136139, 02137881, 02140403, 02128068, 02126087	
71111.05	Corrective Action Documents	Action Requests (ARs)	403399	
	Miscellaneous	ISP 20-0010	Plant Ignition Source Permit for RHR-P-3, H3/4.7	01/22/2020
		TCP 20-001	Transient Combustible Permit for RHR-C inside door R13 - H3/4.7	01/22/2020
	Procedures	1.3.10C	Control of Combustibles	021
		10.2.222	Seismic Storage Requirements for Transient Equipment	002
		ISPM-2	Compressed Gases and Welding/Cutting	011
		PFP-RB-422	Reactor 422	006
	Work Orders		02157539	
71111.06	Corrective Action Documents	Action Requests (ARs)	381023, 405330	
	Drawings	E-822-1	Electrical Manholes Development and Details	004
		E823-1	Underground Duct Banks Plans and Profiles	027

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		E824-2	Underground Duct Banks Plans and Profiles	008
	Engineering Changes	13650	Calc 6.08.01-SII-6 Rev 0 - Modification to Tornado Holddown Bolting for E-MH-E10, E-MH-E11, and E-MH-E15 Manhole Covers	000
	Miscellaneous	19-0454	E-MH-E10 Manhole South of DG Building Barrier Impairment Permit	03/24/2020
		19-0455	E-MH-E11 30' East of Bldg 88 (north end) Building Barrier Impairment Permit	03/24/2020
		5059SCREEN-14-0063	Temporary Concrete Deadmen will be Placed on Top of Class 1 Electrical Manholes E10, E11, and E15	000
	Procedures	1.3.57	Barrier Impairment	038
	Work Orders		02124766	
71111.11Q	Miscellaneous		Crew D 4.0 Critique Summary LR002475	02/03/2020
		LR002475	Operations Requalification Training Cycle 20-1 Evaluated Scenario	000
	Procedures	13.1.1	Classifying the Emergency	049
		ABN-EARTHQUAKE	Earthquake	015
		ABN-ROD	Control Rod Faults	029
		OSP-SW/IST-Q701	Standby Service Water Loop A Operability	032
71111.12	Corrective Action Documents	Action Requests (ARs)	373197, 403552, 403553, 403554, 403557, 403559, 403630, 403631, 403664, 403688, 403732, 404225, 404235, 404245, 404246, 404256, 404257, 404259, 404283, 404303, 404305, 404306	
	Procedures	10.20.18	Division 3 Diesel Generator Engine 2/4/6/12/18 Year Preventive Maintenance	007
		10.25.68	RRC-IMD-ASD1A/1 and RRC-IMD-ASD1A/2 Induction Motor Drive Software Settings and Self-test	000
		MI-1.6	Peer Verification Program	010
		OSP-RRC-C103	RRC Pump Start Temperature and Loop Flow Verification	013
		QAP-ASU-07	Peer Verification Program Planning	005
		SOP-RRC-ASD	Reactor Recirculation ASD Operation	013

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		SOP-RRC-FLOW-QC	Reactor Power Change with RRC Flow Controllers - Quick Card	005
		SOP-RRC-RESTART-QC	Reactor Recirculation Pump Restart - QC	000
		SOP-RRC-SINGLELOOP	Reactor Recirculation Single Loop Operation	014
		SOP-RRC-START	Reactor Recirculation System Start	021
		SWP-INS-01	Quality Control Inspection and Peer Verification	008
	Work Orders		02123657, 02124798, 02126087, 02126091, 02126096, 02126105, 02136348, 02153813, 02126093, 02131506, 02158380, 02158476	
71111.13	Corrective Action Documents	Action Requests (ARs)	403631, 403667	
	Miscellaneous		Fire Tour Log Sheet	01/28/2020
			Fire Tour Log Sheet	01/29/2020
	Procedures	1.3.10	Plant Fire Protection Program Implementation	034
		1.3.76	Integrated Risk Management	059
		1.3.83	Protected Equipment Program	031
		1.3.85	On-Line Fire Risk Management	005
		1.3.86	Online Fire Risk Management	005
		PFP-RW-467	Radwaste 467	005
		SOP-DG2-START	Emergency Diesel Generator (DIV 2) Start	032
		SOP-RFT-START	Reactor Feedwater Turbine System Start	022
71111.15	Calculations	E/I-02-92-1063	Calculation for Setting Range Determination for Instrument Loop MS Differential Pressure Indicating Switch 8A	001
	Corrective Action Documents	Action Requests (ARs)	402942, 301084, 344042, 402397, 403325, 403084, 403090, 397067, 403302	
	Engineering Changes		14942, 14973	
	Miscellaneous	02E22-13,15	Durco Mark 3 Sealed Metallic Pumps	000
		AED-SPC-311	Design Basis Document Residual Heat Removal System	018
	Procedures	1.3.66	Operability and Functionality Evaluation	034

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		ISP-MS-Q928	Main Steam Line HI Flow Channel D - CFT/CC	013
		OSP-SW-M101	Standby Service Water Loop A Valve Position Verification	041
	Work Orders		02147076, 02156728, 02156735, 02157606, 29153247, 02107044, 02128633, 02157539,	
71111.18	Corrective Action Documents	Action Requests (ARs)	369318, 399463, 399557, 403249, 402490, 403302, 403465, 403668, 404607	
	Drawings	A990F07001	Schematic Diagram Air Start System	002
		M512-1	Flow Diagram Diesel Oil & Miscellaneous Systems Diesel Generator Building	047
		M512-1	Flow Diagram Diesel Oil and Miscellaneous Systems Diesel Generator Building	047
	Engineering Changes	12174	One DSA Air Receiver for All Four Air Start Motors of HPCS-DG	000
		15024	Replace Obsolete DG3 DSA-PCV-1C and DSA-PCV-2C Pressure Regulating Assemblies with OEM Recommended Replacement Assemblies	000
	Miscellaneous		DSA-PCV-2C Instrument Master Data Sheet	001, 004
			DSA-PCV-1C Instrument Master Data Sheet	001, 004
		02E22-07,54,1	HPCS Diesel Generator and Battery and Installation	010
		AD-09-1584; SOP-DG-DSA Rev. 5	This is an applicability determination review for procedure SOP-DG-DSA change to Revision 5.	000
		ME-02-94-44	Diesel Starting Air System Capabilities to Meet the Number of Starts Requirement	002, 003
		TM-2076	Design Basis for DSA Air Receiver 1C and 2C to Provide Three Starts	000
	Procedures	1.3.29	Locked Valve Checklist	085
		10.27.63	PM/CAL Test – Pressure Control Valves with Integrated Pilot Regulators – HPCS DG	011
		8.3.290	DG3 Air Receiver Capacity Test	000
		DES-2-10	Minor Alteration	032
		DES-5-4	Design and Safety Assessment	003
		SOP-DG-DSA	Diesel Starting Air Operations	016
	Work Orders		02141293	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.19	Corrective Action Documents	Action Requests (ARs)	403221, 403232, 403894, 403898, 403953, 403958, 402961, 403265	
	Procedures	10.2.10	Fastener Torque and Tensioning	028
		ISP-SEIS-M202	Seismic System Channel Check	002
		MI-1.8	Conduct of Maintenance	073
		OSP-CCH/IST-M701	Control Room Emergency Chiller System A Operability	046
		OSP-ELEC-S703	HPCS Diesel Generator Semi-Annual Operability Test	064
		OSP-INST-M201	Accident Monitoring Instrumentation Channel	015
		OSP-SW/IST-Q701	Standby Service Water Loop A Operability	032
	Work Orders		02182368, 02066997, 02087948, 02136139, 02137881, 02140403, 02128068, 02110369, 02114830, 02131992, 02145234, 02126087, 02123665, 02153813, 02156676, 02120386, 02113572, 00402961	
71111.22	Calculations	02E12-03,6	Residual Heat Removal System Design Specification Data Sheet	009
		C106-92-03.01	Calculation for LPCS Motor Operated Valve Design Basis Review	002
		C106-92-03.03	Calculation for RHR Motor Operated Valve Design Basis Review	005
	Corrective Action Documents	Action Requests (ARs)	403669, 404026, 404079, 404030, 404031, 404062	
	Drawings	EWD-15E-010	Electrical Wiring Diagram Reactor Protection System Trip System B Relays Sheet 1	019
		M520	Flow Diagram: HPCS and LPCS Systems Reactor Building	105
	Miscellaneous	IST-4	Inservice Testing Program Plan Fourth Ten-Year Inspection Interval	003
	Procedures	ISP-MS-B608	Main Steam Isolation Valve Closure Trip Channel B1 - RTT	006
		OSP-ELEC-M701	Diesel Generator 1 - Monthly Operability Test	060
		OSP-ELEC-M702	Diesel Generator 2 - Monthly Operability Test	065
		OSP-FLEX-A102	B.5.B Pumper Truck Flex Functional Test	001
		OSP-LPCS/IST-Q702	LPCS System Operability Test	044

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		OSP-RHR/IST-Q702	RHR Loop A Operability Test	052
		SOP-APRM/LPRM-OPS	APRM/LPRM Operations	001
		SOP-APRM/LPRM-OPS	APRM/LPRM Operations	001
		TSP-LPCS/ISI-G801	ASME LPCS System Leakage Test	004
	Work Orders		02124819, 02069917, 02123922, 02128884, 02146431, 02121561, 02123933, 02153138, 02120416, 02131553	
71114.04	Miscellaneous	LDCN-19-022	Licensing Document Change Notice: EP-01, Rev. 67 Emergency Plan (including 10 CFR 50.54(q) Screening and Evaluation)	02/20/2020
	Procedures	EPI-16	§50.54(Q) Change Evaluation	16
		SWP-LIC-02	Licensing Basis Impact Determinations	15
71151	Corrective Action Documents	Action Requests (ARs)	380257, 387594, 389079, 396522	
	Miscellaneous		Operations Logs	01/01/2019–12/31/2019
	Procedures	1.10.10	Consolidated Data Entry Process Description	008
71152	Corrective Action Documents	Action Requests (ARs)	009870, 280168, 394573, 394458, 394052, 393723, 402394, 402459, 402996, 403007, 403293, 403915, 403947, 405244	
	Procedures	1.5.13	Preventive Maintenance Optimization Living Program	042
		SYS-4-22	Maintenance Rule Program	014
71153	Corrective Action Documents	Action Requests (ARs)	403173, 403256, 403257, 404225	
	Miscellaneous		Reactivity Control Plan January 2020 ASD Channel Recovery	01/15/2020
			Reactivity Control Plan February 2020 RRC-P-1A Recovery and Ascension to 100% CTP	02/15/2020
	Procedures	3.2.6	Power Maneuvering	013

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		ABN-CORE	Unplanned Core Operating Conditions	017
		ABN-FWH-HILEVEL/TRIP	Feedwater Heater High Level Trip	007
		ABN-OG	Off-Gas System Trouble	004
		ABN-POWER	Unplanned Reactor Power Change	016
		ABN-RRC-LOSS	Loss of Reactor Recirculation Flow	016
		SOP-RRC-ASD	Reactor Recirculation ASD Operation	013
	Work Orders		29153498	