



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

February 10, 2021

Ms. Cheryl A. Gayheart
Regulatory Affairs Director
Southern Nuclear Operating Co., Inc.
3535 Colonnade Parkway
Birmingham, AL 35243

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT – INTEGRATED INSPECTION REPORT
05000321/2020004 AND 05000366/2020004 AND INDEPENDENT SPENT
FUEL STORAGE INSTALLATION REPORT 07200036/2020003

Dear Ms. Gayheart:

On December 31, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Edwin I. Hatch Nuclear Plant. On January 25, 2021, the NRC inspectors discussed the results of this inspection with Johnny Weissinger 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,

/RA/

Alan J. Blamey, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket Nos. 05000321, 05000366, and 07200036
License Nos. DPR-57 and NPF-5

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT – INTEGRATED INSPECTION REPORT
 05000321/2020004 AND 05000366/2020004 AND INDEPENDENT SPENT
 FUEL STORAGE INSTALLATION REPORT 07200036/2020003 dated February
 10, 2021

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OFFICE	RII/DRP	RII/DRP			
NAME	N. Staples	A. Blamey			
DATE	02/09/2021	02/10/2021			

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

Docket Numbers: 05000321 and 05000366 and 07200036

License Numbers: DPR-57 and NPF-5

Report Numbers: 05000321/2020004, 05000366/2020004 and 07200036/2020003

Enterprise Identifier: I-2020-004-0043 and I-2020-003-0076

Licensee: Southern Nuclear Operating Co., Inc.

Facility: Edwin I. Hatch Nuclear Plant

Location: Baxley, GA

Inspection Dates: October 01, 2020 to December 31, 2020

Inspectors: B. Caballero, Senior Operations Engineer
C. Dykes, Senior Health Physicist
C. Fontana, Emergency Preparedness Inspector
J. Hickman, Resident Inspector
M. Kennard, Sr. Operations Engineer
D. Lanyi, Senior Operations Engineer
N. Peterka, Fuel Facility Inspector
W. Pursley, Health Physicist
A. Rosebrook, Senior Reactor Analyst
S. Sanchez, Senior Emergency Preparedness Inspector
S. Sandal, Senior Reactor Analyst
R. Smith, Senior Resident Inspector
N. Staples, Senior Project Engineer
J. Walker, Emergency Response Inspector

Approved By: Alan J. Blamey, Chief
Reactor Projects Branch 2
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 Edwin I. Hatch 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

None.

PLANT STATUS

Unit 1 began the inspection period at 100 percent rated thermal power (RTP). On October 30, 2020, the unit was down powered to 50 percent RTP due to removing the 1A Circulating Water Pump (CWP) from service due to motor bearing issue. On October 30, 2020, the unit increased in power to 63 percent RTP until repairs were completed to the 1A CWP. On November 6, 2020, the unit was returned to 100 percent RTP. On December 19, 2020, the unit was down powered to 90 percent RTP for turbine bypass valve testing. On December 19, 2020, the unit was returned to 100 percent RTP and operated there for the remainder of the inspection period.

Unit 2 began the inspection period at 100 percent RTP. On October 17, 2020, the unit was down powered to 70 percent RTP for sequence exchange and quarterly turbine testing. On October 18, 2020, the unit was returned to 98 percent RTP due to issues with computer hard drive associated with feedwater uncertainty recapture. On October 24, 2020, the unit was returned to 100 percent RTP after issues with the computer hard drive were resolved. On November 2, 2020, the unit was down powered to 88.5 percent RTP for a rod pattern adjustment and on November 2, 2020, it was return to 100 percent RTP. On November 12, 2020, the unit was down powered to 82.5 percent RTP for a rod pattern adjustment and on November 12, 2020, it was return to 100 percent RTP. On November 22, 2020, the unit was down powered to 87.5 percent RTP for a rod pattern adjustment and on November 22, 2020, it was return to 100 percent RTP. On December 5, 2020, the unit down powered to 70 percent RTP for turbine valve testing and on December 5, 2020, the unit was returned to 100 percent RTP. On December 9, 2020, the unit reached maximum core flow and began the coast down in power for the 2021, spring refueling outage.

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 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 Disease 2019 (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; conducted plant status activities as described in IMC 2515, Appendix D, "Plant Status"; observed risk-significant activities; and completed on-site portions of IPs. 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 some cases, portions of an IP were completed remotely and on-site. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

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

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of below freezing temperatures for the following systems on December 1, 2020:
 1. Plant Service Water.
 2. Residual Heat Removal Service Water.
 3. Emergency Diesel Generators.

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 severe weather during a Tornado Watch on April 23, 2020.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (2 Samples)

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

- (1) Alignment of the 1E, 1F, and 1G switchgear during the 1B Emergency Diesel Generator (EDG) outage, using 34SO-R22-00-1, 4160 VAC System Attachment 1, 34SO-R43-001-1, Diesel Generator Standby AC System Attachment 2, and 34SV-SUV-013-1, Breaker Alignment Checks Attachments 2 and 3, on October 19 and 21, 2020.
- (2) Alignment of Unit 2 Residual Heat Removal (RHR) System following the 2B RHR maintenance outage, 34SO-E11-010-2, Residual Heat Removal System, Version 44.2 on December 21 and 23, 2020.

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) Unit 2 Standby Gas and Heating Ventilation Air Conditioning (HVAC), Drawing A-43965 Sheets 115, 118, and 119 on October 9, 2020.
- (2) Unit 1 and Unit 2 Intake Structure, Drawing A-43966 Sheet 027 on November 24, 2020.
- (3) Unit 1 Railroad Airlock, Drawing A-43966 Sheet 41 on December 18, 2020.

Fire Brigade Drill Performance Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the onsite fire brigade training and performance during an announced fire drill on October 14, 2020.

71111.06 - Flood Protection Measures

Cable Degradation (IP Section 03.02) (1 Sample)

The inspectors evaluated cable submergence protection in:

- (1) Safety related cable vaults PB1-DO, and PB1-DP,

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

Requalification Examination Results (IP Section 03.03) (1 Sample)

On November 12, 2020, the licensee completed the annual requalification operating test, which is required to be administered to all licensed operators in accordance with Title 10 of the *Code of Federal Regulations* 55.59(a)(2), "Requalification Requirements," of the NRC's "Operator's Licenses." On November 20, 2020, the inspector performed an in-office review of the overall pass/fail results of the individual operating examinations and the crew simulator operating examinations in accordance with Inspection Procedure (IP) 71111.11, "Licensed Operator Requalification Program." These results were compared to the thresholds established in Section 3.02, "Requalification Examination Results," of IP 71111.11.

- (1) On November 20, 2020, the inspector reviewed and evaluated the licensed operator examination failure rates for the requalification annual operating test administration completed on November 12, 2020.

71111.11B - Licensed Operator Requalification Program and Licensed Operator Performance

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

- (1) Biennial Requalification Written Examinations

The inspectors evaluated the quality of the licensed operator biennial requalification written examination administered in December 2019.

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 Unit 2 sequence exchange, deep control rod exercises and scram time testing on October 17, 2020.

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

- (1) The inspectors observed and evaluated License Operator Requalification Program (LORP) Scenario H-LTC-SE-00306, "Station Service Air Compressor Trip, Recirculation Pump Trip, Reactor Feed Pump Turbine High Vibration, Lost of Second Recirculation Pump, Anticipated Transient Without a Scram (ATWS), and Generator Output Breakers Failed to Auto Open," for two teams during annual simulator evaluations on October 28, 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) Review of the Hatch Living a(3) Documentation Package with emphasis on Primary Containment penetration failure on January 4, 2020.
- (2) Unit 1 and Unit 2 Emergency Diesel Generator Fuel Oil Transfer System water intrusion issues on November 20, 2020.

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (3 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) Unit 2 elevated risk due to the Reactor Core Isolation Cooling (RCIC) System Outage on October 7, 2020.
- (2) Unit 1 and Unit 2 elevated risk due to the liner replacement on 1B EDG on October 20, 2020.
- (3) Unit 1 elevated risk due to the liner replacement on 1C Emergency Diesel Generator on December 3, 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) Unit 1 water intrusion into terminal box of 'B' fuel oil transfer pump on 1B EDG on October 14, 2020.
- (2) Unit 1 'B' Plant Service Water (PSW) Pump inoperable due to low In-Service Test (IST) differential pressure ratio on October 30, 2020.
- (3) Unit 1 'B' Reactor Protection System (RPS) output breaker 52-3B failure to trip during function testing on November 12, 2020.
- (4) Unit 1 'A' Plant Service Water pump differential pressure (DP) in the required action range on November 12, 2020.

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (7 Samples)

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

- (1) 34SO-E51-001-2, RCIC Pump Discharge Line Venting, Version 28.2, following Unit 2 RCIC system outage on October 7, 2020.
- (2) 52SV-R43-001-0, Diesel, Alternator, and Accessories Inspection, Version 31.16, following the liner replacement on 1B EDG on October 22, 2020.

- (3) Work Order (WO) SNC814149 1C Residuals Heat Removal Service Water (RHRSW) Pump Functional Test following the internal inspection of check-valve 1E11F005C on October 28, 2020.
- (4) Work Orders SNC631596 and SNC929660 for 2B Reactor Protection System (RPS) one-year preventive maintenance including inspections, lubrication and functional testing and calibration of the power monitoring breakers, on November 10, 2020.
- (5) Work Orders SNC1063991 and SNC1092799 for 1D Residual Heat Removal Service Water pump and check valve replacement functional testing on November 23, 2020.
- (6) 52SV-R43-001-0, Diesel, Alternator, and Accessories Inspection, Version 31.19, following the liner replacement on 1C EDG on December 9, 2020.
- (7) 34SV-R43-006-1, Diesel Generator 1C Semi-annual Test, Version 15.1, following the liner replacement on 1C EDG on December 10, 2020.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

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

- (1) RCIC 2-E51-F012 Motor Operated Valve Acceptance Testing, Work Order SNC842422 on October 6, 2020.

Inservice Testing (IP Section 03.01) (1 Sample)

- (1) 34SV-E51-002-1, RCIC Pump Operability, Version 28.8 (IST, Operating Pressure Test) on October 2, 2020.

FLEX Testing (IP Section 03.02) (1 Sample)

- (1) Work Order SNC947907, FLEX PM: FLEX Pump Hose Trailer Hose Inspection & Refold, on December 8, 2020.

71114.02 - Alert and Notification System Testing

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

- (1) The inspectors evaluated the maintenance and testing of the alert and notification system during the week of November 2, 2020.

71114.03 - Emergency Response Organization Staffing and Augmentation System

Inspection Review (IP Section 02.01-02.02) (1 Sample)

- (1) The inspectors evaluated the readiness of the Emergency Response Organization during the week of November 2, 2020.

71114.04 - Emergency Action Level and Emergency Plan Changes

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

- (1) The inspectors evaluated submitted Emergency Action Level, Emergency Plan, and Emergency Plan Implementing Procedure changes during the week of November 2, 2020. This evaluation does not constitute NRC approval.

71114.05 - Maintenance of Emergency Preparedness

Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

- (1) The inspectors evaluated the maintenance of the emergency preparedness program during the week of November 2, 2020.

71114.06 - Drill Evaluation

Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (1 Sample)

- (1) Emergency Preparedness Drill 20EX06, Seismic event with a loss of all offsite and onsite AC Power on October 28, 2020.

RADIATION SAFETY

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Walkdowns and Observations (IP Section 03.01) (4 Samples)

The inspectors evaluated the following radioactive effluent systems during walkdowns:

- (1) Unit 1 Reactor building ventilation stack monitor.
- (2) Plant Main Stack Radiation Monitors.
- (3) Liquid Radwaste Monitor.
- (4) Unit 2 Reactor building ventilation stack monitor.

Sampling and Analysis (IP Section 03.02) (3 Samples)

- (1) Inspectors evaluated compensatory sampling on the Unit 2 Reactor building ventilation stack monitor.
- (2) Inspectors evaluated effluent particulate and iodine sampling on the main plant stack monitor.
- (3) Inspectors evaluated tritium sampling methodology on the Unit 2 Reactor building ventilation stack monitor.

Dose Calculations (IP Section 03.03) (2 Samples)

The inspectors evaluated the following dose calculations:

- (1) 64CH-RPT-006-0 Liquid Effluents Discharge Permit WSTA-1 L-20191225-624-B, 12/24/2019.
64CH-RPT-006-0 Liquid Effluents Discharge Permit L-20191219-606-C, Y22-N008A, 12/20/2019.
64CH-RPT-006-0 Liquid Effluents Discharge Permit L-2018213-372-C, Y22-N008A, 12/14/2018.

64CH-RPT-006-0 Liquid Effluents Discharge Permit L-20181213-373-C, Y22-N008A, 12/20/2018.

- (2) 64CH-RPT-007-0 GASEOUS EFFLUENTS: DISCHARGE PERMIT PARTICULATE, IODINE AND NOBLE GAS SAMPLE INFORMATION, G-20181211-200-C, 12/13/2018.
64CH-RPT-007-0 GASEOUS EFFLUENTS: DISCHARGE PERMIT PARTICULATE, IODINE AND NOBLE GAS SAMPLE INFORMATION, G-20181218-204-C, 12/19/2018.
64CH-RPT-007-0 GASEOUS EFFLUENTS: DISCHARGE PERMIT PARTICULATE, IODINE AND NOBLE GAS SAMPLE INFORMATION, G-20191210-198-C, 12/12/2019.
64CH-RPT-007-0 GASEOUS EFFLUENTS: DISCHARGE PERMIT PARTICULATE, IODINE AND NOBLE GAS SAMPLE INFORMATION, G-20191217-202-C, 12/28/2019.

Abnormal Discharges (IP Section 03.04)

There were no abnormal discharges during the period covered by the inspection which began in May 1, 2018.

71124.07 - Radiological Environmental Monitoring Program

Environmental Monitoring Equipment and Sampling (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated environmental monitoring equipment and observed collection of environmental samples.

Radiological Environmental Monitoring Program (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the implementation of the licensee's radiological environmental monitoring program.

GPI Implementation (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated the licensee's implementation of the Groundwater Protection Initiative program to identify incomplete or discontinued program elements.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (IP Section 02.12) (1 Sample)

- (1) EP01: Drill & Exercise Performance for the period July 1, 2019, through June 30, 2020.

EP02: ERO Drill Participation (IP Section 02.13) (1 Sample)

- (1) EP02: Emergency Response Organization Drill Participation for the period July 1, 2019, through June 30, 2020.

EP03: Alert & Notification System Reliability (IP Section 02.14) (1 Sample)

- (1) EP03: Alert & Notification System Reliability for the period July 1, 2019, through June 30, 2020.

MS05: Safety System Functional Failures (SSFFs) Sample (IP Section 02.04) (2 Samples)

- (1) Unit 1 (October 1, 2019 to September 30, 2020).
- (2) Unit 2 (October 1, 2019 to September 30, 2020).

MS09: Residual Heat Removal Systems (IP Section 02.08) (2 Samples)

- (1) Unit 1 (July 1, 2019 to September 30, 2020).
- (2) Unit 2 (July 1, 2019 to September 30, 2020).

MS10: Cooling Water Support Systems (IP Section 02.09) (2 Samples)

- (1) Unit 1 (October 1, 2019 to September 30, 2020).
- (2) Unit 2 (October 1, 2019 to September 30, 2020).

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences Sample (IP Section 02.16) (1 Sample)

- (1) Unit 1 January 1, 2019 through October 31, 2020.
Unit 2 January 1, 2019 through October 31, 2020.

71152 - Problem Identification and Resolution

Semiannual Trend Review (IP Section 02.02) (1 Sample)

- (1) The inspectors reviewed the licensee's corrective action program for potential adverse trends in Appendix R Emergency Lighting failures, due to high number of failures through the year that might be indicative of a more significant safety issue.

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

41502 - Nuclear Power Plant Simulation Facilities

Nuclear Power Plant Simulation Facilities (1 Sample)

- (1) The inspector completed inspection of the Unit 1 Plant Reference Simulator (PRS) "B" in accordance with Inspection Procedure (IP) 41502 "Nuclear Power Plant Simulation Facilities."

This inspection reviewed a sample of activities to ensure that Simulator "B" was being tested in accordance with ANSI/ANS-3.5-2009, "Nuclear Power Plant Simulators for Use in Operator Training and Examination" and appropriate approved plant

procedures.

The inspectors reviewed testing to verify that the simulator utilizes models relating to nuclear and thermal-hydraulic characteristics replicating the most recent core load from cold shutdown to rated power plant conditions. Additionally, six transient tests, two steady state tests, five malfunction tests, and one core performance test. Additionally, inspectors reviewed a sample of simulator discrepancies to ensure that they were dispositioned in accordance with appropriate approved plant procedures.

Finally, this inspection reviewed simulator physical fidelity with its reference unit to ensure that PRS "B" was sufficiently designed to allow the performance of evolution's prescribed by 10 CFR 55.45 and 55.59.

The inspector reviewed simulator operation during performance of two Initial License Training (ILT) simulator scenarios using IP 41502 criteria for evaluation of plant-reference simulators under 10 CFR 55.46(c) and (d).

No findings were identified. Results of this inspection were discussed with members of the facility staff on October 28, 2020.

60855.1 - Operation of an Independent Spent Fuel Storage Installation at Operating Plants

Operation of an Independent Spent Fuel Storage Installation at Operating Plants (1 Sample)

- (1) The inspectors evaluated the licensee's activities related to long-term operation and monitoring of their independent spent fuel storage installation on November 6, 2020.

92702 - Follow-Up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, and Orders

Follow-Up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, and Orders (1 Sample)

- (1) On November 20, 2019, as a result of Alternative Dispute Resolution the NRC issued Confirmatory Order (CO) EA-18-130 and EA-18-171 (ML19249B552). The CO was the result of an apparent violation of 10 CFR 53.5, "Employee Protection" at Vogtle Units 3 & 4 which contained actions for the Farley, Hatch and Vogtle Units 1 & 2 nuclear plants. During the week of November 30, 2020, the inspectors reviewed corrective actions for this CO. Because the CO was fleet wide for the Southern Nuclear Company, the corrective actions reviewed by the inspectors-included a review of corrective actions for the Hatch, Farley, and Vogtle Units 1 through 4 nuclear plants. The details can be found in inspection report 0500025/20200012, 0500026/2020012; 11/30/2020 through 12/11/2020; Vogtle Unit 3 Combined License, Vogtle Unit 4 Combined License, CO Follow-Up and SCWE inspection report.

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On January 25, 2021, the inspectors presented the integrated inspection results to Johnny Weissinger and other members of the licensee staff.
- On October 29, 2020, the inspectors presented the Licensed Operator Requalification and Simulator B inspection results to Johnny Weissinger and other members of the licensee staff.
- On November 6, 2020, the inspectors presented the Emergency Preparedness Program inspection results to Sonny Dean and other members of the licensee staff.
- On December 8, 2020, the inspectors presented the RP Baseline Inspection Exit inspection results to Sonny Dean and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
41502	Miscellaneous	NMP-TR-422-004 Att 20 Section 3.4 Criticality	Core Performance Testing – NMP-TR-422-004 Att 20 Section 3.4 Criticality	1/22/2019
		Test 503-1	Loss of Coolant – Outside Primary Containment	2/10/2020
		Test 505-2	Loss of Coolant – Small Reactor Coolant Breaks including Demonstration of Saturation Condition	2/14/2019
		Test 505-2	Loss of Coolant – Small Reactor Coolant Breaks including Demonstration of Saturation Condition	2/14/2019
		Test 521-0	Loss of Protective System Channel	2/14/2019
		Test 522-1	Control Rod Failure including Stuck Rods, Drifting Rods, Rod Drops, and Misaligned Rods	2/10/2020
		Test 527-0	Failure in Automatic Control Systems that Affect Reactivity and Core Heat Removal	2/10/2020
		Test 604-0	Reactor Trip Followed by Recovery to Rated Power	2/15/2019
		Test 707-0	Transient Performance – Maximum Power Ramp Recirc Down to Approximately 75% and Back up to 100%	2/3/2020
		Test 708-2	Transient Performance – Maximum Size Reactor Coolant System Rupture Combined with a Loss of Off-Site Power	2/12/2019
		Test: 615-1	SS Performance 35% Power	2/12/2019
Test: 704-0	Transient Performance –	2/6/2019		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Simultaneous Trip of all Recirculation Pumps	
60855.1	Engineering Evaluations	TE 1053015	Dry Cask Storage - 10 CFR 72.212 Report - Revision for 2020 UFLO	22
	Radiation Surveys		Plant Hatch Radiological Information Survey # 179999 ISFSI	04/28/2020
				Plant Hatch Radiological Information Survey # 180018 ISFSI
71111.01	Procedures	34AB-Y22-002-0	Naturally Occurring Phenomena	19.1
		NMP-OS-017	Attachment 1, Severe Weather Preparation Checklist Maintenance Section for 4/23/2020	2.0
		NMP-OS-017	Attachment 2, Severe Weather Preparation Checklist Chemistry for 4/23/2020	2.0
		NMP-OS-017	Attachment 3, Severe Weather Preparation Checklist Operations for 4/23/2020	2.0
		NMP-OS-017	Attachment 4, Severe Weather Checklist Technology Organization for 4/23/3030	2.0
		NMP-OS-017	Attachment 5, Severe Weather Preparation Checklist Security for 4/23/2020	2.0
		NMP-OS-017	Attachment 6, Severe Weather Preparation Checklist Supply Chain for 4/23/2020	2.0
		NMP-OS-017	Attachment 7, Severe Weather Preparation Checklist Emergency Preparedness for 4/23/2020	2.0
		NMP-OS-017	Severe Weather	3.0
71111.04	Drawings	H-13350	Unit 1 Master Single Line Diagram	30.0
		H-13350	Unit 1 Master Single Line Diagram	30.0
	Procedures	34SO-R22-001-1	4160 VAC System	25.3

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		34SO-R43-001-1	Diesel Generator Standby AC System	29.3
		34SV-SUV-013-1	Breaker Alignment Checks	10.4
71111.05	Fire Plans	Drawing A-43965 Sheets 115, 118, and 119.	Unit 2 Standby Gas and HVAC,	2
	Miscellaneous		Fire Protection Fire Hazards Analysis (FHA)	36.0
		NMP-TR-425-F01	Fire Drill Scenario Development and Approval Sheet for fire in drywell	10/13/2020
	Procedures	NMP-TR-425	Fire Drill Program	9.0
		NMP-TR-425-F14	Fire Drill Package	1.1
71111.06	Procedures	52PM-Y46-001-0	Inground Pullbox Debris Removal/Inspection	10.0
71111.11B	Miscellaneous	H-LTC-SE-00314	314 NRC 2	Ver 1.0
		19-7A RO	2019 RO Written Exam	12/15/2019
		19-7A SRO	2019 SRO Written Exam	12/15/2019
		H-LCT-SE-00302	302 Pilot 2	Rev 0.1
		H-LT-JP-C11-010155	Vent the Scram Header	Ver 16.5
		H-LT-JP-C82-01013A	Perform Plant Operations in Support of a Remote Plant Shutdown (Alternate Path)	Ver 1.0
		H-IT-JP-E41-00515A	Establish Reactor Cooldown with HPCI (Alternate Path)	Ver 0.1
		H-LT-JP-EAL-25068	FG1 Emergency Classification – Complete NMP-EP-141-F01	Ver 3.1
		H-LT-JP-EAL-25208	Determine PARS (SRO only)	Ver 10.1
		H-LT-JP-N33-01702B	Perform TC-1, Seal Steam Failure (Alternate Path)	Ver 0.1
		H-LT-JP-R42-02744	Place the 125/250 VDC Station Service Battery Charger in Service	Ver 19.3
		H-LT-JP-SUV-10022	Conduct of Operations, 34SV-SUV-019-1 Average Drywell Temperature Surveillance	Ver 2.2
		H-LT-JP-T48-01362A	Fast Vent the Drywell (Alternate	Ver 0.5

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Path)	
		H-LTC-SE-00341	341 Pilot 1	Ver 1.0
		H-LTC-SE-00342	314 NRC 1	Ver 0.1
	NDE Reports	H-LT-JP-R43-02824A	Locally Start U2 EDG with Air Start and Energ Bus (Alternate Path)	Ver 1.6
71111.11Q	Corrective Action Documents	CR10746882, 10746887, 10746968, 10747001		
	Miscellaneous	H-LTC-SE-00306	Station Service Air Compressor Trip , Recirculation Pump Trip , Reactor Feed Pump Turbine High Vibration, Lost of Second Recirculation Pump, Anticipated Transient Without a Scram (ATWS), and Generator PCBs (Output Breakers) Failed to Auto Open	1.0
	Procedures	42CC-ERP-011-0	Control Rod Exchange	15.4
		NMP-OS-001	Reactivity Management Program	20.1
		NMP-OS-007-001	Conduct of Operations Standards and Expectations	17.0
		NMP-RE-008-F01	Detailed Reactivity Management Plan (Unit 2 Sequence Exchange)	2.1
71111.12	Corrective Action Documents	CAR 277277	Root Cause Determination Report for PCIVs 2T28F319 and 2T48F320	05/27/2020
		CR10737209		
	Miscellaneous	Maintenance Rule a(1) Action Plan for 2T23-0		
	Procedures	34SO-T48-002-2	Containment Atmospheric Control and Dilution System	29.5
		52-PM-T48-013-0	Purge and Vent Valve T-Ring Replacement	12.6
		MNP-ES-027	Maintenance Rule Program	10.2
	Self-Assessments		Hatch Living (a)(3) Documentation Package	08/01/2018-05/01/2020
71111.13	Calculations		Equipment Out of Service	October 20,

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Calculations	2020.
			Equipment Out of Service Calculations	October 7, 2020.
	Corrective Action Documents	CR 10746694		
	Procedures	NMP-DP-001	Operational Risk Awareness	16.0
		NMP-OS-010-002	Hatch Protected Equipment Logs	11.0
71111.15	Corrective Action Documents	CR 10747548		
		CR10753268		
		CR10753270		
	Engineering Evaluations	TE1077753		
	Miscellaneous		Unit 1 Technical Specifications	Amendment 294
			Unit 2 Technical Specifications	Amendment 239
	Procedures	34SV-P41-001-1	Plant Service Water Pump Operability	15.2
		NMP-AD-012	Operability Determinations and Functional Assessments	13.3
		NMP-AD-012-GL04	Mission Times	1.1
	71111.19	NDE Reports	NMP-ES-024-515	Ultrasonic Gas/Void Examination Report for Unit 2 RCIC
Procedures		34SO-E51-001-2	RCIC Pump Discharge Line Venting	28.2
		52SV-R43-001-0	Diesel, Alternator, and Accessories Inspection	31.16
		57SV-R43-001-0	Diesel, Alternator, and Accessories Inspection	31.19
		NMP-MA-014	Post Maintenance Testing/Post Modification Testing	2.2
		NMP-MA-014-001	Maintenance Testing Guidance	5.2
Work Orders		SNC 814149	Internal inspection of check-valve 1E11F005C	October 28, 2020.

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
		SNC631596, SNC929660		11/10/2020	
71111.22	Miscellaneous	NEI 12-06	Diverse and Flexible Coping Strategies (FLEX) Implementation Guide	Revision 4	
	Procedures	34SV-E51-002-1	RCIC Pump Operability	28.8	
	Work Orders	SNC842422	RCIC 2-E51-F012 Motor Operated Valve Acceptance Testing	10/06/2020	
71114.06	Corrective Action Documents	CR 10749692			
	Miscellaneous		Southern Nuclear Operating Company (SNC) Standard Emergency Plan (SEP)	1.0	
				SNC Standard Emergency Plan Annex for Hatch Nuclear Plant (HNP) Units 1 & 2	1.0
		20EX06		Emergency Preparedness Drill Guide	10/07/2020
	Procedures	NMP-EP-141		Event Classification	1.0
		NMP-EP-142		Emergency Notification	1.0
		NMP-EP-143		Facility Activation,	1.0
71124.06	Calibration Records	64CH-RCL-006-0	Interlaboratory Cross-Check; Gamma Spec	08/2019	
	Corrective Action Documents	10559574, 10724533			
	Miscellaneous	Annual Radioactive Effluent Report		2018; 2019	
	Procedures	NMP-EN-002; NMP-EN-002-GL02	Radiological Groundwater Protection Program; Hatch Nuclear Plant Groundwater Monitoring Plan for Radionuclides	VERSION 9.1, 9.2; Version 1.1	
71124.07	Corrective Action	10616583 10697831			

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents	10726878 10724533		
	Miscellaneous		Annual Radiological Environmental Operating Report	2018; 2019
71151	Miscellaneous	NEI 99-02	Regulatory Assessment Performance Indicator Guideline	Revision 7
	Procedures	NMP-AD-029	Preparation and Reporting of Regulatory Assessment Performance Indicator Data and the Monthly Operating Report	Version 1.1
71152	Corrective Action Documents	CR10674923,10674928,10674930,10683597,106844712, 10691713, 10692524, 10693660, 10702308, 10702309, 10702310, 10707157, 10707157, 10708283, 10711197, 10714683, 10719206, 10721524, 10743478, 10743512, 10743517, 10743783, 10743785, 10743797, 10743800, 10743801, 10744767, 10744769, 10744792, 10745209, 10745211, 10745214, 10747562, 10683988, 10687821, 10698864, 10698867, 10698868, 10698871, 10698926, 10698928, 10698929, 10721527, 10721529, 10721530, 10721531, 10732840, 10737206, 10743805, 10744770, 10744794, 10745187		
	Engineering Evaluations	TE1061317, 1062509, 1062593, 1065490, 1065491, 1066692, 1068404, 1068405,1068406,1068407, 1068407, 1070192, 1071151		
	Fire Plans		Edwin I. Hatch Nuclear Plant Unit 1 and 2 Fire Hazards Analysis, Sections 4.12, 1.9.1, and IV.B5.a/b	38.0
	Miscellaneous	FAS 1-20-003, 004, 005, 020, 030, 048, 068, 069, 070, 075, 079, 080, 081		
	Work Orders	SNC1117152, 1107322		

