



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

May 11, 2021

Mr. Daniel G. Stoddard
Senior Vice President and
Chief Nuclear Officer
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

SUBJECT: NORTH ANNA POWER STATION – INTEGRATED INSPECTION REPORT
05000338/2021001 AND 05000339/2021001

Dear Mr. Stoddard:

On March 31, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at North Anna Power Station. On April 7, 2021, the NRC inspectors discussed the results of this inspection with Mr. Fred Mladen and other members of your staff. The results of this inspection are documented in the enclosed report.

Two findings of very low safety significance (Green) are documented in this report. Two of these findings involved violations of NRC requirements. We are treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violations or the significance or severity of the violations 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 II; the Director, Office of Enforcement; and the NRC Resident Inspector at North Anna Power 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 II; and the NRC Resident Inspector at North Anna Power 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,

/RA/

Stewart N. Bailey, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Nos. 05000338 and 05000339
License Nos. NPF-4 and NPF-7

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: NORTH ANNA POWER STATION – INTEGRATED INSPECTION REPORT
 05000338/2021001 AND 05000339/2021001 DATED May 11, 2021

DISTRIBUTION:

M. Kowal, RII
 S. Price, RII
 L. Gibson, RII
 RidsNrrPMNorthAnna Resource
 RidsNrrDro Resource
 PUBLIC

ADAMS ACCESSION NUMBER: **ML21131A116**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RII/DRP	RII/DRP	RII/DRP	RII/DRP	RII/DRP
NAME	D. Jackson	M. Tobin	K. Carrington	M. Thomas	S. Bailey
DATE	05/07/2021	5/5/2021	5/7/2021	5/5/2021	5/11/2021

OFFICIAL RECORD COPY

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

Docket Numbers: 05000338 and 05000339

License Numbers: NPF-4 and NPF-7

Report Numbers: 05000338/2021001 and 05000339/2021001

Enterprise Identifier: I-2021-001-0075

Licensee: Virginia Electric & Power Co.

Facility: North Anna Power Station

Location: Mineral, VA

Inspection Dates: January 01, 2021 to March 31, 2021

Inspectors: M. Tobin, Senior Resident Inspector
K. Carrington, Resident Inspector
M. Thomas, Senior Resident Inspector (Acting)
B. Towne, Resident Inspector, Surry
J. Diaz-Velez, Senior Health Physicist
B. Kellner, Senior Health Physicist
D. Jackson, Senior Project Engineer
P. Niebaum, Senior Project Engineer

Approved By: Stewart N. Bailey, Chief
Reactor Projects Branch 4
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 North Anna Power 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

Failure to identify surveillance test discrepancies associated with the '1J' and '2J' emergency diesel generators (EDGs).			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000338,05000339/2021001-01 Open/Closed	[H.12] - Avoid Complacency	71152
The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XI, Test Control, for the licensee’s failure to identify surveillance test discrepancies associated with the '1J' and '2J' emergency diesel generators (EDGs). As a result, the EDGs were declared inoperable and retested using revised procedures before they were returned to an operable status.			

Failure to Implement Locking and Tagging Controls Which Impacted the 125 VDC System			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green NCV 05000338,05000339/2021001-02 Open/Closed	[H.11] - Challenge the Unknown	71152
A self-revealing finding of very low safety significance (Green) with an associated non-cited violation (NCV) of Technical Specifications 5.4.1a, “Procedures,” was identified for the licensee’s failure to properly plan and perform maintenance that can affect the performance of safety-related equipment in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances in accordance with Regulatory Guide 1.33, “Quality Assurance Program Requirements (Operation).” Specifically, while performing work on the ‘B’ reserve service station transformer (RSST), the licensee failed to ensure adequate locking and tagging controls were in place prior to landing leads and energizing a 125-voltage direct-current (VDC) circuit which resulted in voltage fluctuations within the safety-related DC system.			

Additional Tracking Items

None.

PLANT STATUS

Unit 1 began the inspection period at rated thermal power. On February 20, 2021, the unit began coasting down in power for their planned refueling outage. The unit was shut down for a planned refueling outage on March 13, 2021, and remained shut down for the remainder of the inspection period.

Unit 2 operated at or near rated thermal power for the entire 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 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

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; extreme cold weather during week of January 31 and February 7, 2021.

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 high head charging system during 2C charging pump maintenance week of January 19, 2021.
- (2) Unit 1 turbine driven auxiliary feedwater system on January 26, 2021.
- (3) 1J emergency diesel generator when the 1H emergency diesel generator was tagged out of service on February 12, 2021.

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

- (1) The inspectors evaluated system configurations during a complete walkdown of the residual heat removal system on March 30, 2021.

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) 2H emergency diesel generator room on February 24, 2021
- (2) Unit 2 cable vault and tunnel on March 19, 2021
- (3) service water pump house on March 10, 2021
- (4) auxiliary building elevation 244' on March 3, 2021
- (5) control room on March 5, 2021

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

- (1) The inspectors evaluated the onsite fire brigade training and performance during an unannounced fire drill on January 19, 2021.

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 1 refueling outage shutdown during the week of March 14, 2021.

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

- (1) The inspectors observed and evaluated licensed operator annual requalification operating tests in the simulator on January 26, 2021.

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) 1-CH-P-1B, 1B Charging Pump, (a)(1) evaluation because unavailability (UA) hours performance criteria exceeded on March 12, 2021.
- (2) Periodic evaluation of maintenance rule program 50.65(a)(3) on March 4, 2021.

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (7 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) Maintenance risk assessment week of February 8, 2020, when the 1H emergency diesel generator was tagged out of service on February 12, 2021.
- (2) Maintenance risk assessment on February 16, 2021, during swap from Unit 2 'C' to 'B' feedwater pump and winter weather advisory (icing) on February 18, 2021.
- (3) Risk associated with RCS draindown for vessel head removal on March 16, 2021.
- (4) Risk associated with heavy lift of the high-pressure turbine enclosure on March 10, 2021.
- (5) Maintenance risk assessment on March 11, 2021, with the 2H emergency diesel generator inoperable due to emergent issues on March 15, 2021.
- (6) Unplanned shutdown risk change associated with Unit 1 hot leg recirculating valves 1-SI-MOV-1869B and 1-SI-MOV-1890B inoperability on March 25, 2021.
- (7) Shut down Risk associated with Unit 1 transition from Mode 5 to Mode 4 on March 14, 2021.

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) CR1163149 - 2H emergency diesel generator tripped due to faulty lamp socket on February 24, 2021.
- (2) CR1161726 - 2-CC-P-1B exceeded its [inservice testing] vibration alert limit on February 25, 2021.
- (3) CR1162043 - 1-SW-115B motor operated valve body erosion on March 31, 2021.
- (4) CR1168702- 1-EG-LI-100A 2A underground storage tank level spurious indication; CR1168144- 1-EG-LI-100A inaccurate indication while filling on March 29, 2021.

71111.19 - Post-Maintenance Testing

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

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

- (1) Work Order (WO) 59203313795 PMT following 1J fuel oil transfer pump relief valve maintenance, on January 20, 2021.

- (2) Unit 2 125 VDC battery charger (2-BY-BC-2-III) PMT on January 21, 2021, following replacement, on January 25, 2021.
- (3) WO 59203351320 - 2H emergency diesel generator PMT following replacement of a shorted lamp socket that caused an unexpected emergency diesel generator trip, on February 17, 2021.
- (4) WO 59103097686 - U1 'A' charging pump speed increaser replacement on February 25, 2021.
- (5) Unit 2 'H' emergency diesel generator PMT following output breaker replacement and troubleshooting on March 22, 2021.
- (6) WO 59203326270- Unit 2 component cooling water pump 1B PMT following overhaul and shaft replacement on March 29, 2021.

71111.20 - Refueling and Other Outage Activities

Refueling/Other Outage Sample (IP Section 03.01) (1 Partial)

- (1) (Partial)
The inspectors evaluated refueling outage 1R28 activities from March 13, 2021, to March 31, 2021.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

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

- (1) WO 59203312155 - 1-PT-82H - 1H emergency diesel generator test on January 6, 2021.
- (2) 2-PT-71.2Q- Unit 2 'A' motor-driven auxiliary feedwater pump and valve test, on January 28, 2021.
- (3) 2-PT-33.13 and 2-PT-33.14- Unit 2 RCP bus undervoltage/underfrequency surveillance tests, on January 20, 2021.
- (4) 1-PT-57.1B- Unit 1 SI pump B surveillance test, on February 17, 2021.
- (5) 1-PT-36.5.3B- Train 'B' solid state protection system output slave relay test, on February 17, 2021.

Inservice Testing (IP Section 03.01) (2 Samples)

- (1) WO 59203311288 - 2-PT-71.1Q - Unit 2 steam driven auxiliary feedwater pump quarterly test on January 5, 2021.
- (2) WO 59203312126 - 1-PT-71.2Q - Unit 1 'A' motor driven auxiliary feedwater pump and valve test on January 7, 2021.

71114.06 - Drill Evaluation

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

- (1) 'B' team emergency preparedness drill on February 23, 2021.

RADIATION SAFETY

71124.01 - Radiological Hazard Assessment and Exposure Controls

Radiological Hazard Assessment (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated how the licensee identifies the magnitude and extent of radiation levels and the concentrations and quantities of radioactive materials and how the licensee assesses radiological hazards.

Instructions to Workers (IP Section 03.02) (1 Sample)

The inspectors evaluated instructions to workers including radiation work permits used to access high radiation areas.

- (1) The inspectors reviewed the following:

Radiation Work Packages (RWPs)

- 21-3106 - Minor Maintenance in High Radiation Areas (HRAs), Revision 0
- 21-3130 - Walkdowns in HRAs, Revision 0
- 21-3220 - NDE in Locked High Radiation Areas (LHRAs), Revision 0
- 21-3230 - General Walkdown & Inspection, Revision 0

Electronic Alarming Dosimeter Alarms

- Reviewed one valid dose alarm that occurred in February 2021
- Reviewed 14 planned or pre-briefed dose rate alarms that occurred during the inspection period

Labeling of Containers

- Observed labeling and material condition of 10 radioactive material containers located in various locations inside the Protected Area (PA)
- Observed labeling and material condition of 20 radioactive material containers located in various Radioactive Material (RAM) storage locations outside the PA

Contamination and Radioactive Material Control (IP Section 03.03) (3 Samples)

The inspectors evaluated licensee processes for monitoring and controlling contamination and radioactive material.

- (1) Observed licensee surveys of potentially contaminated material leaving the radiologically controlled area (RCA).
- (2) Observed workers exiting the RCA during the Unit 1 refueling outage.
- (3) Observed workers exiting the Unit 1 containment, removing protective clothing, and monitoring during a refueling outage.

Radiological Hazards Control and Work Coverage (IP Section 03.04) (3 Samples)

The inspectors evaluated in-plant radiological conditions during facility walkdowns and observation of radiological work activities.

- (1) The inspectors also reviewed the following radiological work package for areas with airborne radioactivity:
 - 21-3209 - Install and remove scaffolding during N1 R28, Revision 0
- (2) The inspectors also reviewed the following radiological work package for areas with airborne radioactivity:
 - 21-3201 - Incore Drive unit 5 and 10 path unit lubrication, inspection, cleaning, adjustment, and repair, Revision 0
- (3) The inspectors also reviewed the following radiological work package for areas with airborne radioactivity:
 - 21-3253 - Work in the Transfer Canal, Revision 0

High Radiation Area and Very High Radiation Area Controls (IP Section 03.05) (5 Samples)

The inspectors evaluated licensee controls of the following High Radiation Areas and Very High Radiation Areas:

- (1) Unit 1 transfer canal upender and track (LHRA)
- (2) Unit 1 and 2 volume control tank rooms (LHRA)
- (3) Unit 1 incore sump access ('keyway') (Very High Radiation Area)
- (4) Unit 1 241' elevation regenerative heat exchanger cubicle (LHRA)
- (5) 249' elevation fuel building basement - access door to 'demin alley' (LHRA)

Radiation Worker Performance and Radiation Protection Technician Proficiency (IP Section 03.06) (1 Sample)

- (1) The inspectors evaluated radiation worker and radiation protection technician performance as it pertains to radiation protection requirements.

71124.08 - Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation

Radioactive Material Storage (IP Section 03.01) (2 Samples)

- (1) Inspectors evaluated the licensee's performance in controlling, labeling, and securing radioactive materials. Verified inventory and control of the Victoreen CHARMS calibration source (S/N 104).
- (2) Inspectors evaluated the licensee's performance in controlling, labeling, and securing radioactive materials. Verified inventory and control of two high activity (Category 2) box calibrator sources (S/Ns 03127GY, and KR-4095).

Radioactive Waste System Walkdown (IP Section 03.02) (1 Sample)

- (1) Inspectors walked down accessible portions of the solid radioactive waste systems and evaluated system configuration and functionality.

Waste Characterization and Classification (IP Section 03.03) (2 Samples)

- (1) The inspectors evaluated the licensee's characterization and classification of radioactive waste (Dry Active Waste).
- (2) The inspectors evaluated the licensee's characterization and classification of radioactive waste (Spent Resin Holdup Tank).

Shipment Preparation (IP Section 03.04) (2 Samples)

- (1) The inspectors observed that a shipment containing radioactive material was prepared according to requirements.
 - Shipment of Unit 1 Pressurizer Safety (Limited Quantity shipment).
Shipment # 21-1013, 3/18/2021
- (2) The inspectors observed completion of the incoming radiological survey and receipt of a shipment containing radioactive material according to requirements.

Shipping Records (IP Section 03.05) (6 Samples)

The inspectors evaluated the following non-excepted radioactive material shipments through a record review:

- (1) Radioactive Material Shipment #19-BCO-05.
- (2) Radioactive Material Shipment #20-BCO-01.
- (3) Radioactive Material Shipment #20-BCO-03.
- (4) Radioactive Material Shipment #19-CWF-01.
- (5) Radioactive Material Shipment #20-BCO-07.
- (6) Radioactive Material Shipment #20-WCS-01

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 03.01) (2 Samples)

- (1) Unit 1 (January 2020 – December 2020)
- (2) Unit 2 (January 2020 – December 2020)

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 03.02) (2 Samples)

- (1) Unit 1 (January 2020 – December 2020)
- (2) Unit 2 (January 2020 – December 2020)

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 03.03) (2 Samples)

- (1) Unit 1 (January 2020 – December 2020)
- (2) Unit 2 (January 2020 – December 2020)

OR01: Occupational Exposure Control Effectiveness Sample (IP Section 03.15) (1 Sample)

- (1) Units 1 and 2 (July 2020 through February 2021)

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 human performance that might be indicative of a more significant safety issue on February 24, 2021.

Annual Follow-up of Selected Issues (IP Section 02.03) (3 Samples)

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

- (1) CR 1164001 - Follow-up on a 4Q2020 minor violation associated with inadequate procedure on February 10, 2021. The inspectors selected this as a routine minor violation close-out follow-up. The inspectors ensured that the close-out of the minor violation was adequate and ensured that the inadequate procedure associated with the RPV lower internals installation was correctly updated.
- (2) CR 1162157- Landing hot wires for [reserve service station transformer] 'B' cause plant battery issues. The inspectors selected this issue for follow-up based on the increased number of human performance events onsite. The inspectors reviewed the licensee's corrective actions and dispositioning of the event as a Level 1 clearance and tagging event. The inspectors verified the issue was assigned the appropriate significance commensurate with the event. One non-cited violation was identified as documented in the results section of this report.
- (3) CR 1165766 - Electrical work on live system due to personnel not signing on to a tagout on March 31, 2021.

INSPECTION RESULTS

Failure to identify surveillance test discrepancies associated with the '1J' and '2J' emergency diesel generators (EDGs).			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000338,05000339/2021001-01 Open/Closed	[H.12] - Avoid Complacency	71152
The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XI, Test Control for the licensee's failure to identify surveillance test discrepancies associated with the '1J' and '2J' emergency diesel generators (EDGs). As a result, the EDGs were declared inoperable and retested using revised procedures before they were returned to an operable status.			
<u>Description:</u> On November 13, 2020, the inspectors were provided a copy of surveillance test procedure 2-PT-82.12J, "2J Diesel Generator Isochronous Mode (Start by ESF Actuation)," Rev. 40-OTO1, conducted on October 1, 2020. During the week of November 17, 2020, the inspectors reviewed the information associated with the EDG load reject portion of the test to verify the times documented in the procedure for voltage and frequency to return to steady state values following the load rejection. The inspectors reviewed this procedure because it			

was used as a post-maintenance test following replacement of the 2J EDG electronic governor.

The data recorder used for this surveillance test, with the data needed to verify the test requirements were satisfied, was stored at another facility within the fleet. Because that data recorder was not readily available that day, the inspectors chose to review load reject data associated with a similar test procedure, 2-PT-83.12J, "2J Diesel Generator Test (Start by ESF Actuation) Followed by 24-Hour Run and Hot Restart Test," which was conducted on September 16, 2020. The inspectors identified discrepancies associated with the documented voltage test results on November 18, 2020. The discrepancies were documented in the licensee's corrective action program as Condition Report (CR) 1161094. The licensee later determined that the test on September 16, 2020, was performed satisfactorily when signal noise was filtered out using the data recorder. The inspectors noted that use of the test recorder to filter out signal noise was not documented in the test procedure.

As part of the licensee's continued review for the issue documented in CR 1161094, the licensee identified a discrepancy associated with the load reject portion of test procedure 2-PT-82.12J conducted on October 1, 2020. Specifically, step 6.24.4.d.2 recorded the time for EDG voltage to return to steady state values following the load rejection as 1.12 seconds. When a more thorough review of the test recorder data was conducted, the actual time was found to be 4.21 seconds. This exceeded the acceptance criteria of less than 3 seconds required by the procedure and surveillance requirement (SR) 3.8.1.9. On November 18, 2020, this was documented as CR 1161080 and the licensee declared the 2J EDG inoperable. The licensee conducted four troubleshooting runs of the 2J EDG on November 18 and 19, 2020. Following the troubleshooting runs, on November 19, 2020, the licensee conducted a one-time-only test using procedure 2-PT-82.12J, verified that the load rejection capability of the '2J' EDG was satisfactory, and declared '2J' EDG to be operable.

On November 20, 2020, in response to the issues identified with the load reject portion of the surveillance tests associated with 2J EDG, the licensee reviewed surveillance test procedure 1-PT-83.12J for the '1J' EDG conducted on September 10, 2019. During this review, it was determined that the kiloVolt-Ampere-Reactive (kVAR) loading of the '1J' EDG was recorded as 0 kVAR when step 6.17.2 required a range of 400-500 kVAR. As a result, the licensee declared the '1J' EDG inoperable, conducted a one-time only test using procedure 1PT-82.12J at the proper kVAR setting, obtained satisfactory results, and subsequently returned the '1J' EDG to operable status on November 20, 2020.

Corrective Actions: The licensee revised the EDG test procedures and reperformed the load rejection portion of the applicable surveillance test procedures. Additionally, on one occasion, the licensee made an adjustment to the data recorder to filter out signal noise to obtain a satisfactory test result.

Corrective Action References: CRs 1161080, 1161094, and 1161213

Performance Assessment:

Performance Deficiency: The failure to initially identify unsatisfactory load rejection test results for the '1J' EDG on September 19, 2019 and the '2J' EDG following performance of surveillance test procedures 2-PT-83.12J and 2-PT-82.12J conducted on September 16, 2020, and October 1, 2020, respectively, was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Human Performance 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, licensee personnel responsible for reviewing and approving the emergency diesel generator load reject surveillance tests failed to identify testing discrepancies. Additionally, this issue was sufficiently similar to example 3.k in the NRC's Inspection Manual Chapter (IMC) 0612, Appendix E, "Examples of Minor Issues," issued on December 10, 2020. Specifically, the licensee had to perform additional actions that would continue to demonstrate operability of the 1J and 2J EDGs. For the 2J EDG surveillance conducted on September 16, 2020, the licensee made an adjustment to the data recorder to filter out signal noise to obtain a satisfactory test result. For the 2J EDG surveillance initially conducted on October 1, 2020, the licensee reformed the load rejection portion of the surveillance test with a lower starting bus voltage. For the 1J EDG surveillance test initially conducted on September 19, 2019, the licensee adjusted kVARs to the correct setting and adjusted the bus voltage before obtaining a satisfactory load reject test.

Significance: The inspectors assessed the significance of the finding using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings at-Power," dated January 1, 2021. The finding was determined to be of very low safety significance, GREEN, because when screened using Exhibit 2, "Mitigating Systems Screening Questions," all of the screening questions were answered with "No."

Cross-Cutting Aspect: H.12 - Avoid Complacency: Individuals recognize and plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes. Individuals implement appropriate error reduction tools. The licensee failed to use appropriate error reduction tools when performing and reviewing EDG surveillance test procedures.

Enforcement:

Violation: 10 CFR Part 50, Appendix B, Criterion XI, Test Control, requires, in part, that testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures; and test results shall be documented and evaluated to assure that the test requirements have been satisfied. Contrary to those requirements, the licensee failed to assure the test requirements were satisfied for the 2J EDG surveillance test conducted with licensee procedure 2-PT-83.12 on September 16, 2020, and for the 2J EDG surveillance test conducted with licensee procedure 2-PT-82.12J on October 1, 2020; and failed to verify testing of the 1J EDG was performed in accordance with surveillance test procedure 1-PT-83.12J on September 10, 2019.

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

Failure to Implement Locking and Tagging Controls Which Impacted the 125 VDC System]			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green NCV 05000338,05000339/2021001-02 Open/Closed	[H.11] - Challenge the Unknown	71152

<p>A self-revealing finding of very low safety significance (Green) with an associated non-cited violation (NCV) of Technical Specifications 5.4.1a, "Procedures," was identified for the licensee's failure to properly plan and perform maintenance that can affect the performance of safety-related equipment in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances in accordance with Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)." Specifically, while performing work on the 'B' reserve service station transformer (RSST), the licensee failed to ensure adequate locking and tagging controls were in place prior to landing leads and energizing a 125-voltage direct-current (VDC) circuit, which resulted in voltage fluctuations within the safety-related DC system.</p>			
<p><u>Description:</u> On December 9, 2020, while troubleshooting an electronic temperature monitor for the 'B' RSST, a control operations technician discovered wires to three instrument gauges for the 'B' RSST that had not been properly terminated. The technician then solicited assistance from the substation supervisor and requested the support of substation electricians to terminate the wires to these gauges. The work to terminate (land) the wires did not undergo the proper challenge, screening, authorization, or lockout/tagout review prior to commencement. As a result, the work proceeded without ensuring adequate tagout controls were in place for equipment and personnel protection and without the required live-dead-live checks in accordance with licensee procedure OP-AA-201, "Lockout."</p>			
<p>While wires for the three instrument gauges were being terminated, a breaker was closed in the downstream 125 VDC circuit, energizing the lines where the work was being performed. This resulted in alarms in the main control room and voltage fluctuations on the safety-related 125 VDC system. The control operations technician was immediately contacted by the Unit 1 control room operators and directed to stop work activities. The work was immediately halted, the circuit breaker was manually opened, deenergizing the circuit, and the associated alarms cleared. The licensee documented this issue in its corrective action program as condition report (CR) 1162157.</p>			
<p><u>Corrective Actions:</u> Corrective actions included immediately halting work, deenergizing the 125 VDC circuit by manually opening the associated breaker, restoring equipment to a safe condition, updating station procedures, training personnel, and documenting the issue as a Level 1 clearance and tagging event, i.e. major or severe event where no barriers remained between personnel and hazardous energy warranting a human performance review board and more in-depth corrective actions.</p>			
<p><u>Corrective Action References:</u> CR1162157</p>			
<p><u>Performance Assessment:</u></p> <p><u>Performance Deficiency:</u> The inspectors determined the failure to properly plan and perform maintenance such as landing leads while simultaneously energizing an upstream circuit by ensuring adequate locking and tagging controls were in place in accordance with licensee procedure OP-AA-200 had the potential to affect safety-related 125 VDC equipment and was a performance deficiency.</p> <p><u>Screening:</u> The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to preplan maintenance resulted in an unplanned</p>			

energization of wires in the 125 VDC circuit causing equipment trouble alarms in the main control room and voltage fluctuations on the safety-related 125 VDC system. Absent control room intervention, the fluctuations had the potential to become more extensive (i.e. result in the loss of safety-related 125 VDC equipment).

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The finding was determined to be of very low safety significance, GREEN, because when screened using Exhibit 1, "Initiating Events Screening Questions," all of the screening questions were answered "No."

Cross-Cutting Aspect: H.11 - Challenge the Unknown: Individuals stop when faced with uncertain conditions. Risks are evaluated and managed before proceeding. The inspectors determined the finding had a cross-cutting aspect of H.11, Challenge the Unknown, in the Human Performance area. Specifically, the licensee failed to stop when faced with uncertain conditions or evaluate and manage risks before landing wires associated with the 'B' RSST that were outside the original scope of work.

Enforcement:

Violation: Technical Specification 5.4.1.a, Procedures, requires, in part that written procedures be established, implemented, and maintained covering activities listed in Regulatory Guide 1.33, "Quality Assurance Program Requirements," Revision 2, Appendix A, February 1978.

Regulatory Guide 1.33, Appendix A, Section 9a, states, in part, that maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written procedures

Licensee Procedure OP-AA-201, "Lockout," Revision 6, Section 3.2.7, requires in part, ensuring the tagging boundary is adequate for the work being performed and live-dead-live check is performed before starting ANY work if necessary, for safety.

Contrary to those requirements, on December 9, 2020, the licensee failed to properly preplan and perform maintenance in accordance with written procedures when electricians performed work without the adequate locking and tagging controls in place, which inadvertently energized wires associated with the 'B' RSST and caused voltage fluctuations on safety-related DC equipment.

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

Observation: Semiannual Trend Review - Human Performance Events	71152
---	-------

Through a review of recent issues documented in the licensee's corrective action program, the inspectors were concerned that a negative trend may exist in human performance (HU) that can potentially impact nuclear safety. The inspectors are concerned that if human performance is not improved, subsequent HU events may challenge the station in operating the plant safely. The following examples demonstrate a negative trend in HU events (during the last 6 months):

1. CR1163289 – Scaffold builder received a pinched finger due to a missed communication between other builders working on same component.
2. CR1163935 – Employee in a company vehicle contacted a stationary parking bollard in parking lot.
3. CR1164057 – Employee entered a vital area improperly.
4. CR1164370 – Employees began work to clean a strainer that was not protected by a tagout.
5. CR1165012 – Operator did not leave radiologically controlled area at 80 percent of the dose alarm which resulted in the employee receiving a dose alarm.
6. CR1165328 – An hourly fire watch was performed 8 minutes late.
7. CR1165576 – Employees found a security door unsecured.
8. CR1165941 – Worker dropped a 20lb wrench 8 foot below grazing the leg of another worker below.
9. CR1166110 – An outdated revision to a procedure was used by workers instead of the appropriate active version.
10. CR1166093 – A non-limiting technical requirements manual action was not appropriately logged in the Narrative Logs or the LCO tracking database.
11. CR1165201 – NRC identified administrative discrepancy in a corrective action for updating procedures as a result of the Fall 2020 refueling outage issue with the reactor pressure vessel lower internals.
12. CR1166332 – NRC identified transient combustibles in the 2H emergency diesel generator room without a permit.
13. CR1166446 – Technicians used the wrong data values while rescaling Unit 1 T_ref.

The inspectors note that each of the above identified HU issues did not adversely affect nuclear safety; however, the inspectors believe that a degrading trend in human performance could lead to more safety significant issues. The licensee has addressed each HU event individually, and plans to reinforce standards on site across all groups by conducting sitewide standdowns and increase oversight in the field. The inspectors will continue to monitor this trend.

EXIT MEETINGS AND DEBRIEFS

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

- On April 7, 2021, the inspectors presented the integrated inspection results to Mr. Fred Mladen, Site Vice President and other members of the licensee staff.
- On March 18, 2021, the inspectors presented the radiation protection inspection results to Mr. Fred Mladen, Site Vice President and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Procedures	0-GOP-4.2	Extreme Cold Weather Operations	43
71111.04	Corrective Action Documents	CR	1165578	
71111.04	Procedures	1-IPM-XX-MISC-11	Verification of Transmitter Valve Lineup	15
71111.04	Procedures	1-OP-14A	Valve Checkoff - Residual Heat Removal	10
71111.04	Procedures	1-OP-31.2	Steam Generator Auxiliary Feedwater System	39
71111.04	Procedures	1-OP-31.2A	Valve Checkoff - Auxiliary Feedwater	
71111.04	Procedures	1-OP-6.2	Operation of No. 1J Emergency Diesel Generator from Control Room	57
71111.04	Procedures	1-OP-6.2A	Valve Checkoff - 1J Diesel Engine Cooling Water	9
71111.04	Procedures	1-OP-6.4A	Valve Checkoff - 1J Diesel Engine Lube Oil System	8
71111.05	Calculations	EP-0017	Combustible Loading Analysis North Anna Power Station	20
71111.05	Corrective Action Documents	CR	1166332	
71111.05	Corrective Action Documents	CR	1166425	
71111.05	Drawings	12050-FM-309B-4	Fire Barrier Penetrations Emergency Diesel Generator Room Sh. 2	
71111.05	Engineering Evaluations	ETE-NA-2011-0021	Evaluation of Permanently Stored Combustible Material	8
71111.05	Fire Plans	1-FS-AB-1	Auxiliary Building Fire Fighting Strategy	7
71111.05	Fire Plans	1-FS-SW-1	Service Water Pumphouse Units 1 and 2	3
71111.05	Procedures	0-FS-CR-1	Control Room - Units 1&2 Safe Shutdown Equipment	4
71111.05	Procedures	1-FS-DR-1	Unit 1 and 2 Emergency Diesel Engine Rooms	8
71111.05	Procedures	CM-AA-FPA-100	Fire Protection/Appendix R (Fire Safe Shutdown) Program	15
71111.05	Procedures	CM-AA-FPA-101	Control of Combustible and Flammable Materials	14
71111.05	Procedures	CM-AA-FPS-101 Attachment 8	Transient Combustible Loading Limits and Restrictions	14
71111.05	Procedures	SA-AA-115	Fire Protection Maintenance	5

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.12	Corrective Action Documents	CRs 1149869, 1145284		
71111.12	Engineering Evaluations	1-CH-1B (a)(1) action plan	UA hours exceeded performance criteria	08/24/2020
71111.12	Procedures	ER-AA-MRL-100	Implementing Maintenance Rule	13
71111.13	Corrective Action Documents	CR	1167419	
71111.13	Drawings	11715-FM-096A, Sheet 1	Flow/Valve Operating Numbers Diagram Safety Injection System	40
71111.13	Drawings	11715-FM-096A, Sheet 2	Flow/Valve Operating Numbers Diagram Safety Injection System	43
71111.13	Procedures	0-MCM-1403-02	High Pressure (HP) Turbine Enclosure Removal and Installation	7
71111.13	Procedures	1-PT-138.1	HHSI Flow Balance	14
71111.13	Procedures	OP-NA-601	Protected Equipment	16
71111.13	Procedures	WM-AA-301 Attachment 15	High Risk Plan Actions	
71111.13	Work Orders	WO59203309667	Unit 1 High Pressure Turbine HP Enclosure Removal	
71111.15	Corrective Action Documents	CR	1161726	
71111.15	Corrective Action Documents	CR	1165547	
71111.15	Corrective Action Documents	CR	1163149	
71111.15	Procedures	2-PT-74.2B	Component Cooling Pump 2-CC-P-1B Test	33
71111.15	Procedures	2-PT-82.9H	2H Emergency Diesel Generator Test (Local Operation)	48
71111.15	Procedures	OP-AA-100-1001 - Attachment 1	Operations Site Specific Instructions for Replacement of Indicating Light Bulbs	2
71111.15	Work Orders	WO	59203306581	
71111.15	Work Orders	WO	59203324823	12/10/2020
71111.18	Drawings	1700236-12050-FE-10B		
71111.18	Engineering Changes	DC NA-17-00236	Station Battery Chargers 2-III, 2-IV, and 2C-II Replacement	1

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.18	Work Orders	WO	59203316665	
71111.19	Corrective Action Documents	CR	1165457	
71111.19	Corrective Action Documents	CR	1165455	
71111.19	Miscellaneous	BCT-2000 Software and BCT-128 and BCT-256	Users Guide	
71111.19	Miscellaneous	IEEE 380-1971	IEEE Standard Criteria for Class 1E Power Systems for Nuclear Power Generating Stations	9/16/1971
71111.19	Miscellaneous	IEEE 450-1987	IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations	3/9/1987
71111.19	Miscellaneous	IEEE 485-1983	IEEE Recommended Practice for Sizing Large Lead Storage Batteries for Generating Stations and Substations	9/30/1983
71111.19	Miscellaneous	NA-VTM-000-59-N163-00001	Vendor Technical Manual: Type SU/SD High Speed Increasers & Reducers	4
71111.19	Procedures	0-ECM-2820-01	Electrical Corrective Maintenance - Lamp Socket Replacement	3
71111.19	Procedures	0-EMP-0302-12	BBC/ITE 4160-Volt Type 5HK Breaker Change Out	11
71111.19	Procedures	1-PT-14.1	Operations Periodic Test - Charging Pump 1-CH-P-1A	58
71111.19	Procedures	1-PT-81.1B	Emergency Diesel Generator Fuel Oil Transfer Pumps 1-EG-P-1JA and 1-EG-P-1JB Quarterly Test	24
71111.19	Procedures	1-PT-82.4B	1J Diesel Generator Test (Start by ESF Actuation)	57
71111.19	Procedures	2-EPM-0108-03	Testing of Station Battery Charger 2-III Alarms	6
71111.19	Procedures	2-OP-6.8 OTO1	Slow Start and Operation of 2H Emergency Diesel Generator	41 OTO1
71111.19	Procedures	2-PT-82H.1	Lubrication and Rotation of 2H Emergency Diesel Generator	3
71111.19	Procedures	2-PT-87.3J	Station Battery Charger 2-III Service Test	22-OTO-2
71111.19	Procedures	2-PT-87.3J	Station Battery Charger 2-III Service Test	10/22/2001
71111.19	Work Orders	WO	59203351320	
71111.19	Work Orders	WO	59103097686	
71111.19	Work Orders	WO	59203313795	01/20/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.20	Miscellaneous		2021 Outage Plan Safety Review- North Anna Unit 1	03/08/2021
71111.20	Miscellaneous		1R28 Shutdown Risk Assessment	03/14/2021 - 03/30/2021
71111.20	Procedures		Foreign Material Exclusion	
71111.20	Procedures	1-GOP-13	Alternate Core Cooling Method Assessment	12
71111.20	Procedures	1-GOP-13.0	Alternate Core Cooling Method Assessment Guidelines	22
71111.20	Procedures	1-OP-3.3	Unit Shutdown From Mode 4 to Mode 5	71
71111.20	Procedures	1-OP-3.7	Unit Shutdown from Mode 1 to Mode 5 for Refueling	54
71111.20	Procedures	1-OP-4.1	Controlling Procedure for Refueling	92
71111.20	Procedures	1-OP-4.1A	Mode Change Checklist from Mode 6 to 5	14
71111.20	Procedures	1-OP-5.4	Draining the Reactor Coolant System	84
71111.20	Procedures	OU-AA-200	Shutdown Risk Management	11
71111.22	Corrective Action Documents	CR	1132296	
71111.22	Corrective Action Documents	CR	27749	
71111.22	Corrective Action Documents	CR	1155243	
71111.22	Corrective Action Documents	CR	1150010	
71111.22	Corrective Action Documents	CR	1153596	
71111.22	Corrective Action Documents	CR	1163588	
71111.22	Miscellaneous		North Anna Power Station Unit 1 Inservice Testing Program Plan for Pumps and Valves - Fifth Inservice Testing Interval	
71111.22	Miscellaneous		North Anna Power Station Unit 2 Inservice Testing Program Plan for Pumps and Valves - Fifth Inservice Testing Interval	
71111.22	Miscellaneous	NU-REG 1482	Guidelines for Inservice Testing at Nuclear Power Plants	3
71111.22	Procedures	1-PT-36.5B	Solid State Protection System Output Slave Relay Test (Train B)	39
71111.22	Procedures	1-PT-57.1B	Emergency Core Cooling Subsystem - Low Head Safety Injection Pump (1-SI-P-1B)	58
71111.22	Procedures	1-PT-71.2Q	1-FW-P-3A, A Motor Driven AFW Pump and Valve Test	47

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.22	Procedures	1-PT-82H	1H Emergency Diesel Generator Slow Start Test	66
71111.22	Procedures	2-PT-71.1Q	2-FW-P-2, Turbine Driven Auxiliary Feedwater Pump and Valve Test	72
71111.22	Procedures	2-PT-71.2Q	2-FW-P-3A, A Motor-Driven AFW Pump, and Valve Test	46
71111.22	Procedures	AD-AA-102	Procedure Use and Adherence	16
71111.22	Procedures	ER-AA-IST-10	ASME Inservice Testing Program	7
71111.22	Procedures	OP-AA-100	Conduct of Operations	43
71111.22	Procedures	PI-AA-5000	Human Performance	10
71111.22	Work Orders	WO	59203311288	
71111.22	Work Orders	WO	59203312155	
71111.22	Work Orders	WO	59203312126	
71114.06	Corrective Action Documents	CR	1166343	
71124.01	Corrective Action Documents		CR1155565, CR1155825, CR1157022, CR1157454, CR1157847, and CR1158379	Various
71124.01	Miscellaneous		List of current or potential Locked High Radiation Areas (LHRAs) and Very High Radiation Areas (VHRAs)	02/11/2021
71124.01	Miscellaneous	List of Radioactive Material (RAM) storage areas and satellite Radiologically Controlled Areas (RCAs) [RMAs and RCAs Inside and Outside the Protected Area]		02/26/2021
71124.01	Miscellaneous	Unit 1 & 2 Spent Fuel Pool non-fuel inventory lists		02/18/2021
71124.01	Procedures	RP-AA-201	Access Controls for High and Very High Radiation Areas	10
71124.01	Procedures	RP-AA-202	Radiological Posting	13
71124.01	Procedures	RP-AA-225	Unrestricted Release of Material	8

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.01	Procedures	RP-AA-230	Personnel Contamination Monitoring and Decontamination	12
71124.01	Procedures	RP-AA-231	Radiological Control Areas	6
71124.01	Procedures	RP-AA-240	Discrete Radioactive Particle Control	3
71124.01	Procedures	RP-AA-274	Radiation Work Permits	10
71124.01	Procedures	RP-AA-275	Radiological Risk Assessment Process	4
71124.01	Procedures	RP-AA-279	Providing HP Coverage During Work	4
71124.01	Radiation Surveys	Unit 1 Containment Initial Entry Survey	All elevations except reactor cavity and incore sump.	03/14/2021
71124.01	Radiation Surveys	Unit 1 Reactor Cavity initial entry, except transfer canal		03/14/2021
71124.01	Radiation Surveys	Unit 1 Seal Table during Eddy Current		03/16/2021
71124.01	Radiation Surveys	Unit 1 Transfer Canal initial entry		03/15/2021
71124.01	Radiation Work Permits (RWPs)	2021 Non-Outage RWP List	Including dose and dose rate alarm setpoints	01/22/2021
71124.08	Miscellaneous		Radioactive Waste/Material Qualification List	9/25/2020
71124.08	Miscellaneous		List of Category 1 and 2 radioactive material storage areas	02/1/2021
71124.08	Miscellaneous	0-PT-153	Annual National Source Tracking Reconciliation (for 2019, 2020, and 2021)	January 2019, 2020, and 2021
71124.08	Miscellaneous	10 CFR Part 37	Radiation Protection Qualification Roster	2/16/2021
71124.08	Miscellaneous	C-HP-1071.010, Attachment 1	2020 Annual Radioactive Source Inventory	01/08/2020
71124.08	Miscellaneous	C-HP-1071.010, Attachment 1	2021 Annual Radioactive Source Inventory	01/202021
71124.08	Miscellaneous	HPTCTP-20-Cycle-03	Radiation Protection Annual Training Attendance Rosters (June/July 2020)	Various
71124.08	Miscellaneous	HPTCTP-20-	2020 Radioactive Waste Packaging, Transportation, and	Various

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Cycle-03-LP-1	Disposal Training (attendance roster(s) and instructor presentation with notes)	
71124.08	Procedures	C-HP-1071.040	PACKAGING AND SHIPMENT OF RADIOACTIVE MATERIAL	18
71124.08	Procedures	C-HP-1072.010	PACKAGING RADIOACTIVE WASTE	3
71124.08	Procedures	C-HP-1072.050	RADIOACTIVE WASTE TRANSFER TO LICENSED WASTE PROCESSORS	16
71124.08	Procedures	C-HP-1072.070	RADIOACTIVE WASTE DISPOSAL USING THE ENERGYSOLUTIONSCONTAINERIZED WASTE FACILITY	11
71124.08	Procedures	C-HP-1072.071	RADIOACTIVE WASTE DISPOSAL USING THE ENERGYSOLUTIONSBULK WASTE FACILITY	10
71124.08	Procedures	HP-1032.134	GUIDANCE/SPECIAL INSTRUCTIONS FOR PLANT SYSTEMS FILTER CHANGEOUT	2
71124.08	Procedures	HP-1032.135	GUIDANCE/SPECIAL INSTRUCTIONS FOR FILTER CHANGE OUT WITHOUT USING SHIELDED CASK	1
71124.08	Procedures	HP-1071.022	PLACING SECURE ENVIRONMENTAL CONTAINERS (SEC) INTO STORAGE INSIDE THE PROTECTED AREA	2
71124.08	Procedures	HP-1072.020	SAMPLING, ANALYZING, AND CLASSIFYING SOLID RADIOACTIVE WASTE	12
71124.08	Procedures	HP-1072.080	RADIOACTIVE WASTE TRANSFER TO ERWIN RESINSOLUTIONS, AND ENERGY SOLUTIONS WASTE PROCESSOR FOR (TYPE B CASK), TN	14
71124.08	Procedures	HP-1072.090	RADIOACTIVE WASTE DISPOSAL TEXAS COMPACT WASTE DISPOSAL FACILITY (CWF)	6
71124.08	Procedures	HP-1072.100	GUIDANCE FOR PRIMARY RESIN TRANSFER TO A LINER	0
71124.08	Procedures	HP-1072.300	PLACING, TRANSFERRING AND RETRIEVING FILTERS WITHIN OSSC STORAGE	2
71124.08	Procedures	RMSIP-1	Physical Protection of Category 1 and 2 Radioactive Material	0
71124.08	Procedures	RP-AA-108	Radioactive Material Control Program	5
71124.08	Procedures	RP-AA-232	Radioactive Material Control	9
71124.08	Procedures	SY-AA-106	Control of Safeguards Information, Security-Related Information, and Controlled Unclassified Information	19

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.08	Procedures	SY-AA-TR-300	Nuclear Security Training 10 CFR 37 Requirements	1
71124.08	Procedures	VPAP-2104	Radioactive Waste Process Control Program (PCP)	8
71124.08	Radiation Surveys	1-RC-SV-1551B	Unit 1 Pressurizer Safety Valve after removal from system.	03/16/2021
71124.08	Radiation Surveys	L-82683-1	Part 61 Anion Resin Survey	
71124.08	Radiation Surveys	L-83760-2	Part 61 Common DAW Survey	
71124.08	Radiation Surveys	L-84754-1, L-90653-1	Part 61 Spent Resin Holdup Tank Surveys	
71124.08	Radiation Surveys	RM Receipt # 21-RMR-13	CoreVis Box 2 Rad Material Incoming Rad Shipment Survey	03/17/2021
71124.08	Radiation Surveys	RM-B1-301	Shipment survey of package containing pressurizer safety valve 1-RC-SV-1551B.	03/16/2021
71124.08	Self-Assessments	Audit 20-06	Radiation Protection, Process Control Program, and Chemistry	9/16/2020
71151	Corrective Action Documents		CR1154543, and CR1165012	Various
71152	Corrective Action Documents	CR	1156615	
71152	Corrective Action Documents	CR	1164001	
71152	Corrective Action Documents	CR	1165201	
71152	Corrective Action Documents Resulting from Inspection	CR	1169722	
71152	Procedures	0-MCM-1112-02	Installation of the Reactor Vessel Lower Internals	