



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

November 12, 2021

Mr. Christopher P. Domingos
Site Vice President
Prairie Island Nuclear Generating Plant
Northern States Power Company, Minnesota
1717 Wakonade Drive East
Welch, MN 55089-9642

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT – INTEGRATED
INSPECTION REPORT 05000282/2021003 and 05000306/2021003

Dear Mr. Domingos:

On September 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Prairie Island Nuclear Generating Plant. On October 7, 2021, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

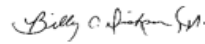
One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

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 III; the Director, Office of Enforcement; and the NRC Resident Inspector at Prairie Island Nuclear Generating Plant.

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 III; and the NRC Resident Inspector at Prairie Island Nuclear Generating Plant.

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,



Signed by Dickson, Billy
on 11/12/21

Billy C. Dickson, Jr., Chief
Branch 2
Division of Reactor Projects

Docket Nos. 05-282, 05-306
License Nos. DPR-42, DPR-60

Enclosure: 05000282/2021003,
05000306/2021003

Enclosure:
As stated

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Letter to Christopher Domingos from Billy Dickson dated November 12, 2021.

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT – INTEGRATED
INSPECTION REPORT 05000282/2021003 and 05000306/2021003

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers: 05000282 and 05000306

License Numbers: DPR-42 and DPR-60

Report Numbers: 05000282/2021003 and 05000306/2021003

Enterprise Identifier: I-2021-003-0101

Licensee: Northern States Power Company

Facility: Prairie Island Nuclear Generating Plant

Location: Welch, MN

Inspection Dates: July 1, 2021 to September 30, 2021

Inspectors: S. Bell, Health Physicist
K. Pusateri, Resident Inspector
N. Shah, Project Engineer
D. Tesar, Senior Resident Inspector

Approved By: Billy C. Dickson, Jr., Chief
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 Prairie Island Nuclear Generating 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

Failure to Maintain and Use Procedures Adequate to Ensure Reliability and Availability of the Emergency Diesel Generators.			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000306,05000282/2021003-01 Open/Closed	[H.5] - Work Management	71111.15
A NRC identified Green non-cited violation (NCV) associated with Title 10 of the <i>Code of Federal Regulations</i> (CFR) Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when Xcel Energy Prairie Island Nuclear Generating Plant (PINGP) did not ensure that adequate instructions, procedures, or drawings included appropriate quantitative or qualitative acceptance criteria for ensuring that important activities were satisfactorily accomplished related to the sites Emergency Diesel Generators (EDGs). Specifically, there were examples where PINGP failed to implement the appropriate procedures or utilized inadequate procedures for preventive and corrective maintenance on their EDGs, and support systems, resulting in multiple events causing inoperability/unavailability of their EDGs.			

Additional Tracking Items

None.

PLANT STATUS

Unit 1 began the inspection period at full rated thermal power. On August 24, 2021, the unit was down powered to approximately 90 percent as procedurally required due to the loss of the 2A and 2B Moisture Separator Reheaters (MSR). The unit was returned to full rated thermal power on August 25, 2021, once the steam supply valves to the MSR's were manually opened. Unit 1 remained at or near full power for the remainder of the inspection period, with the exception of brief power reductions to perform surveillance testing or flexible power operations. Unit 2 began the inspection period at full rated thermal power. Unit 2 began its coast down into the 2R32 refueling outage on August 22, 2021, at 12:58 a.m.

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 (COVID-19), resident and regional 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, increasing the amount of time on-site as local COVID-19 conditions permitted. As part of their on-site activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution," 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 a portion 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

External Flooding Sample (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated that flood protection barriers, mitigation plans, procedures, and equipment are consistent with the licensee's design requirements and risk analysis assumptions for coping with external flooding on July 22, 2021.

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) 12 Motor Driven Auxiliary Feedwater Pump while 11 pump was out-of-service on July 14, 2021
- (2) Unit 1 Component Cooling Water System on July 27, 2021
- (3) Unit 2 D5 EDG Fuel Oil System Walkdown on August 2, 2021
- (4) Unit 1 D2 Air Start System on August 16, 2021
- (5) Spent Fuel Pool Rad Monitors and Special Ventilation during fuel moves on August 26, 2021

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (7 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) D5 and D6 Emergency Diesel Generator Rooms on July 13, 2021
- (2) Fire Zone 8 Auxiliary Building Ground Floor, El. 695' on July 27, 2021
- (3) Fire Zone 9 Unit 1 Auxiliary Building, El. 715' on July 27, 2021
- (4) Fire Area 22 Safeguards Bus 121 on July 29, 2021
- (5) Fire Area 80 Safeguards Bus 111 on July 29, 2021
- (6) Fire Area 16 Train B Event Monitoring Equipment Room August 3, 2021
- (7) Fire Area 82 480V Safeguard Switchgear Room Bus 122 August 3, 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) Unit 1 Loss of MSR 2A and 2B on August 25, 2021

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

- (1) Observed Simulator Training on August 23, 2021

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (4 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) 23 D5 Fuel Oil Transfer Pump failure to develop discharge pressure (AR 501000054593) on August 2, 2021
- (2) D2 Diesel Failure to Stop (AR 501000055313) on August 20, 2021
- (3) AOV Common Cause Failures consideration during Expert Panel on July 1, 2021
- (4) MOV Program Review on August 13, 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) Risk assessment during emergent issue with Bus 15 27R relay failure on July 20, 2021
- (2) Risk assessment during Bus 32 work on July 26, 2021
- (3) T-3 Scope Freeze Package Review on August 12, 2021
- (4) 122 Diesel Driven Fire Pump Shutdown (AR 501000055318) on August 23, 2021
- (5) 121 Control Room Ventilation outage (WO700081045-0010) on July 7, 2021
- (6) Inverter 14 Transfer to Alternate Source on September 15, 2021
- (7) Cross Train Work Week of August 30, 2021 D2 level calibrations, 22 Battery Charger work on August 31, 2021

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (8 Samples)

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

- (1) D6 Emergency Diesel Generator Operability SP 2305 VR Rectifier Failure Alarm on July 19, 2021
- (2) Loss of 10 Bank Transformer due to Ground and Recovery on July 22, 2021
- (3) D2 Diesel Generator Slow Start Test on August 16, 2021
- (4) 23 D5 Fuel Oil Transfer Pump failure to develop discharge pressure (AR 501000054593) on August 18, 2021
- (5) Bus 26 Sequencer Failure on September 3, 2021
- (6) 11 FRV Primary Circuit Failure on September 3, 2021
- (7) Inverter 14 transfer to alternate source on September 9, 2021
- (8) CL System Through Wall Leakage (ARs 501000055562 and 501000055723) on September 7, 2021

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Fuel Oil Supply Line for 23 D5 FO Storage Tank (EC601000001947) on May 17, 2021
- (2) 2 - 500 Ton Chiller Temporary Modification on August 22, 2021

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) 11 Turbine Driven Auxiliary Feedwater Pump following ruptured disk replacement on July 14, 2021
- (2) MV-323130 21 Excess Letdown HX CC Inlet (WO 700025179) on July 13, 2021
- (3) D2 Air Start Solenoid B train failed during slow start on August 27, 2021
- (4) SV-33696/33829 Post Maintenance Testing on September 24, 2021
- (5) 22 Battery Charger 10 Year Maintenance on September 1, 2021
- (6) 11 FW Reg Valve Post Maintenance Testing on September 1, 2021

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (4 Samples)

- (1) Bus 25 Load Sequencer testing on July 13, 2021
- (2) SP 1305 D2 Diesel Generator Slow Start Test on August 17, 2021
- (3) 21 to 22 Auxiliary Feed Water Pump Check Valve Leakage on July 20, 2021
- (4) SP 1088A Train A Safety Injection Quarterly Test (WO 700083592) on August 3, 2021

FLEX Testing (IP Section 03.02) (1 Sample)

- (1) TP 1869 B and C Functional Test FLEX 300 KW Diesel Generator on August 18, 2021

RADIATION SAFETY

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

Permanent Ventilation Systems (IP Section 03.01) (1 Sample)

The inspectors evaluated the configuration of the following permanently installed ventilation systems located on the 755' elevation of the auxiliary building.

- (1) 121 Spent Fuel Pool (SFP) Special and Inservice Purge
12 Shield Building
11 Shield Building
121 Auxiliary Building

71124.05 - Radiation Monitoring Instrumentation

Walkdowns and Observations (IP Section 03.01) (5 Samples)

The inspectors evaluated the following radiation detection instrumentation during plant walkdowns:

- (1) The inspectors observed the portable survey instrumentation available for use located at the Radiologically Controlled Area (RCA) exit.
- (2) The inspectors observed the operation of the JL Shepherd instrument calibrator.
- (3) The inspectors observed the source performance checks of the fixed RP instrumentation located at the RCA exit.
- (4) The inspectors observed the operation of the gamma spectroscopy radiochemistry system.
- (5) The inspectors observed the operation of the Canberra Fastscan whole body counter.

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

Radioactive Material Storage (IP Section 03.01) (1 Sample)

- (1) Inspectors observed the licensee's performance in controlling, labelling and securing radioactive materials. The areas observed included the Replacement Steam Generator Building and Area 19, Outside Radioactive Material Storage Yard.

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 bead resin radioactive waste.
- (2) The inspectors evaluated the licensee's characterization and classification of filter media radioactive waste.

Shipping Records (IP Section 03.05) (4 Samples)

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

- (1) Radioactive Waste Shipment, 19-018, of bead resin packaged in a Type A package. This was Class B waste.
- (2) Radioactive Material Shipment, 20-049, of refueling outage equipment packaged in general design packages.
- (3) Radioactive Waste Shipment, 21-012, of primary resin packaged in a Type A package. This was Class B waste.
- (4) Radioactive Waste Shipment, 20-005 of filters packaged in a general design package. This was Class C waste.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS06: Emergency AC Power Systems (IP Section 02.05) (2 Samples)

- (1) Unit 1 from October 1, 2020, to June 30, 2021 on September 21, 2021
- (2) Unit 2 from October 1, 2020, to June 30, 2021 on September 21, 2021

71152 - Problem Identification and Resolution

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

- (1) 122 SFGD Traveling Screen Issues on August 23, 2021

Annual Follow-Up of Selected Issues (IP Section 02.03) (2 Samples)

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

- (1) Heater Drain Tank Pump Issues Cognitive Trend Analysis on July 21, 2021
- (2) Risk Awareness and Assessment Prior to Execution July 27, 2021

INSPECTION RESULTS

Failure to Maintain and Use Procedures Adequate to Ensure Reliability and Availability of the Emergency Diesel Generators.			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000306,05000282/2021003-01 Open/Closed	[H.5] - Work Management	71111.15
<p>A NRC identified Green non-cited violation (NCV) associated with Title 10 of the <i>Code of Federal Regulations</i> (CFR) Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when Xcel Energy Prairie Island Nuclear Generating Plant (PINGP) did not ensure that adequate instructions, procedures, or drawings included appropriate quantitative or qualitative acceptance criteria for ensuring that important activities were satisfactorily accomplished related to the sites Emergency Diesel Generators (EDGs). Specifically, there were examples where PINGP failed to implement the appropriate procedures or utilized inadequate procedures for preventive and corrective maintenance on their EDGs, and support systems, resulting in multiple events causing inoperability/unavailability of their EDGs.</p>			
<p><u>Description:</u></p> <p>Starting in December of 2019, the inspectors identified several examples where licensee staff failed to demonstrate a lack of rigor and sensitivity related to the Emergency Diesel Generators (EDGs); each of these examples adversely affected the operability/reliability of the affected EDGs. These examples included:</p> <p>On 12/2/2019, the Unit 2 D5 EDG was declared inoperable after the licensee identified a hole on the 3-inch fuel supply line during surface cleaning in preparation for a new coating. During the review of the licensee's operability assessment, the inspectors identified that the licensee did not recognize that this issue also affected the D6 EDG, as it would have been unable to meet its 14-day mission time following a design basis flood, while the D5 was inoperable. Therefore, both EDGs were outside their design bases. In response, on 12/4/2019, the licensee installed a temporary clamp over the hole restoring both EDGs to operable/available; however, the inspectors determined that the clamp was installed using the incorrect procedure. Specifically, the clamp was installed using procedure IP-ENG-001, Attachment 5, "Design Equivalency Change Process," instead of following the guidance in FP-OP-OL-01, "Operability" for the use of compensatory measures. The later procedure included the required steps for completing a 50.59 screening or similar evaluation before implementation. The purpose of this screening is to, in part, assess whether the corrective action required a License Amendment (i.e., NRC Approval) prior to implementation. In this case, the licensee subsequently concluded that the clamp would not have required a Licensee Amendment. The inspectors concluded that the licensee had not applied the appropriate technical rigor to ensure that the EDGs design basis was maintained. The licensee initially failed to recognize the impact to the D6 EDG and subsequently used the incorrect procedure, resulting in a missed 50.59 screening/evaluation. The licensee documented these issues in the CAP as 501000054534, 501000053548, and 501000053547. On 8/11/2021, the licensee removed the temporary clamp and replaced the affected piping to repair the line permanently.</p> <p>In March of 2021, during planned maintenance on Unit 1 D2 EDG, the licensee temporarily removed and later reinstalled the terminals for the "A" and "B" train air start solenoid valves.</p>			

These are redundant safety-related valves that supply starting air for the D2 EDG. After completing the maintenance, the licensee performed surveillance procedure SP 1307, "D2 Diesel Generator 6 Month Fast Start Test", as a Post Maintenance Test (PMT). FP-WM-PMT-01, "Post-Maintenance Testing" specifies that "... the PMT specified in the work plan is adequate for the work performed." and that "the objective of the Post-Maintenance Testing (PMT) is to provide reasonable assurance that the equipment will perform its intended function(s) when needed." The inspectors concluded that this PMT was inadequate. The fast start test utilizes both air start systems in parallel to start the diesel, making it impossible to distinguish whether the "A" or "B" air start solenoids were working individually. Subsequently, on 8/16/2021, the D2 EDG failed to start using only the "B" air start solenoid. Because the "A" air start solenoid was available during this period, the D2 EDG was considered operable; however, its reliability was decreased as the licensee had not realized that the "B" solenoid was potentially non-functional due to the inadequate PMT. The EDG accrued additional unavailability time to facilitate the replacement of the "B" Train air start solenoid. The inspectors concluded that this was another example where the licensee had not applied the appropriate technical rigor to ensure that the EDG design basis was maintained. Specifically, by not performing the appropriate PMT, the licensee did not ensure that the D2 EDG was reliable by ensuring that both air starting solenoids were functional. The licensee documented these issues in the CAP as 501000055190 and 501000055123.

Following replacement of the "B" train Air Start Solenoid valve for the D2 EDG, on August 20, 2021, the Licensee performed a modified version of surveillance procedure SP 1307, "D2 Diesel Generator 6 Month Fast Start Test", as the PMT for the "B" train solenoid replacement. After verifying the diesel start, the station attempted to shut down the D2 EDG. The D2 diesel failed to stop from the remote switch in the Control Room. The Licensee utilized the local control switch to shut down the D2 EDG resulting in the EDG being Inoperable and Unavailable. FP-WM-PMT-01, "Post-Maintenance Testing" specifies that "the PMT specified in the work plan is adequate for the work performed" and that "the PMT should consider the plant impact of the PMT." Subsequently, the Licensee determined that the marked-up copy of the surveillance they used to perform the PMT had inadvertently marked steps necessary to properly secure the diesel as "Not Applicable" (N/A). The inspectors considered this another example of the failure to apply appropriate technical rigor to ensure that the EDG design basis was maintained. In this case, the licensee's failure to properly evaluate the impact of the modified procedure steps on the D2 EDG resulted in additional unavailability time. The licensee documented this issue in the CAP as 501000055313.

The licensee entered all issues identified by the inspectors into the Corrective Action Program (CAP) as specified above and are being tracked to resolution.

Corrective Actions: 501000053547 "Questions from NRC SRI on D5 FO T-Mod", 501000053548 "NRC Question on 50.59 for D5 FO TMOD", 501000054534 "D6 14 Day mission time", 501000055123 "D2 Fail to Start", 501000055190 "D2 Starting valve PMT Inadequate", 501000055313 "D2 Fail to stop"

Performance Assessment:

Performance Deficiency: 10 CFR 50 Appendix "B" Criterion V, "Instructions, Procedures, and Drawings" requires that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Contrary to the above, from December 2019 through August 2021, the licensee failed to ensure activities affecting quality were accomplished in accordance with instructions, procedures, or drawings to ensure the activities had been satisfactorily accomplished. Specifically, the licensee failed to perform corrective and preventive maintenance in accordance with appropriate procedures adequate for the circumstances ensuring satisfactory completion of the activities resulting in unplanned inoperability and unavailability of the Emergency Diesel Generators.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment 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, the licensee failed to perform corrective and preventive maintenance in accordance with appropriate procedures adequate for the circumstances ensuring satisfactory completion of the activities resulting in unplanned inoperability and unavailability of the Emergency Diesel Generators.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The finding screened to Green based upon "No" responses to the six screening questions in "Exhibit 2 – Mitigating Systems Screening Questions." Specifically, the inspectors determined that the D5, D6 or D2 EDGs were restored to operability well within their allowed outage time.

Cross-Cutting Aspect: H.5 - Work Management: The organization implements a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work and the need for coordination with different groups or job activities.

The inspectors concluded that the H.5 cross-cutting aspect was applicable, in that the licensee failed to apply the proper technical rigor to control and execute work on the D5, D6 and D2 EDGs, as stated in the above examples, such that the safety-function and reliability of these components was adequately maintained.

Enforcement:

Violation: 10 CFR 50 Appendix "B" Criterion V, "Instructions, Procedures, and Drawings" requires that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Contrary to the above, the inspectors identified examples where the licensee failed to implement the appropriate procedures or utilized inadequate procedures for preventive and corrective maintenance on their EDGs, and support systems, resulting in multiple events causing inoperability/unavailability of their EDGs. Specifically,

- On 12/2/2019, the licensee failed to identify that the D6 EDG was outside of its licensing basis while performing the operability assessment for the D5 EDG after identifying a hole in the fuel oil transfer piping.
- On 12/4/2019, the licensee failed to perform a 50.59 screening/evaluation to assess the impact of installing a temporary clamp as a compensatory measure to restore the operability of the D5 EDG, in accordance with procedure FP-OP-OL-01, "Operability."
- On 03/30/2021, the licensee performed an inadequate PMT to ensure the reliability of the D2 EDG, in that it failed to ensure both air start solenoids were capable of functioning ensuring that the EDG would start under a design basis accident.

In addition to the above examples identified by the NRC, on 08/20/2021, the licensee identified that they had incorrectly performed a subsequent PMT on the D2 EDG, in that they had failed to recognize that the steps to properly secure the diesel following testing, were inadvertently marked "N/A" on the test procedure.

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

Observation: Risk Awareness and Mitigation Prior to Execution	71152
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The inspectors conducted a sample associated with inadequate risk reviews for planned work. The inspectors identified 28 instances over a 12-month period where the licensee did not identify the risk associated with planned work activities until or prior to implementation. This trend was also identified by the Corporate Functional Area Manager (CFAM) who initiated a CFAM Elevation in Integrated Risk Management. Corrective Action Program (CAP) Quality Issue Management (QIM) 501000055788 was initiated to drive actions and track recovery associated with the elevation. The inspectors identified no findings or violations of NRC requirements of more than minor safety significance in the course of this review.

Observation: Trend Review of 122 Safeguards Traveling Screen	71152
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Inspectors performed a trend review of issues associated with the 121 and 122 Safeguards Traveling Screens. The 122 Safeguards Traveling Screen had 17 Corrective Action Program (CAP) deficiencies identified over nine months, with 11 of those deficiencies being identified during the 3rd quarter inspection period. The licensee also identified the adverse trend with the increased frequency of deficiencies and initiated CAP 501000055126 to resolve the underlying issue and eliminate the additional burden to Operations staff. The inspectors identified no findings or violations of NRC requirements of more than minor safety significance in the course of this review.

Observation: Cognitive Trend Analysis for Heater Drain Tank Pumps	71152
Inspectors performed a trend review of Corrective Action Program documents associated with Heater Drain Tank Pumps. The inspectors did not identify any adverse trends or non-compliances with licensee or regulatory requirements. No findings or violations of NRC requirements of more than minor safety significance were identified by the inspectors in the course of this review.	

EXIT MEETINGS AND DEBRIEFS

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

- On July 8, 2021, the inspectors presented the radiation protection baseline inspection results to Mr. C. Domingos, Site Vice President, and other members of the licensee staff.
- On October 7, 2021, the inspectors presented the integrated inspection results to Mr. C. Domingos, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04	Calculations	1C14	Component Cooling System - Unit 1	51
71111.04	Procedures	C28-2	Auxiliary Feedwater System Unit 1	55
71111.05	Corrective Action Documents Resulting from Inspection	501000054105	Missing Pages from SP 1192 Record	07/15/2021
71111.05	Fire Plans	F5 Appendix A	Fire Detection Zone 43 Fire Area 22	43
71111.05		F5 Appendix A	Fire Detection 43 Fire Area 80	46
71111.05		F5, Appendix A	Fire Detection Zone 97, D5/D6 Building	46
71111.05		F5, Appendix F	Fire Hazards Analysis (PP 101-125)	37
71111.05		F5 Appendix 8	Fire Detection Zone 8, Fire Area 58, and Part of 73	41
71111.05		F5 Appendix A	Fire Detection Zone 19, Fire Areas 59, 84, and 65	41
71111.12	Corrective Action Documents	501000054593	23 D5 Fuel Oil Transfer Pump failure to develop discharge pressure	08/01/2021
		501000055313	D2 Fail to stop	08/20/2021
71111.15	Corrective Action Documents	501000053547	Questions from NRC SRI on D5 FO T-Mod	06/25/2021
		501000053548	NRC Question on 50.59 for D5 FO TMOD	06/25/2021
		501000054534	D6 14 Day mission time	07/28/2021
		501000055123	D2 Fail to Start	08/16/2021
		501000055190	D2 Starting valve PMT Inadequate	08/18/2021
		501000055313	D2 Fail to stop	08/20/2021
		501000049987	D6 didn't come up to full speed	03/30/2021
		501000053505	Minor Corrosion on DSL FO Piping	06/24/2021
		501000054180	D6 Volt. Reg Rect. Fail. Alarm	07/19/2021
		501000054445	D6 (D5) ER, Fast-Start Ckt Review	07/27/2021
	Procedures	IP-ENG-001	Standard Design Process	0
		FP-E-MOD-02	Engineering Change Control	32
		TP-2075	D5 Fuel Oil Transfer to D6 Fuel Oil Day Tank Test	6
		FP-WM-PMT-01	Post-Maintenance Testing	0
		FP-OP-OL-01	Operability	22
	Miscellaneous	500000315158	Prompt Operability Determination SP 1130B Containment	0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Vacuum Breaker Quarterly Test	
71111.19	Corrective Action Documents	501000054077	Turbine Driven Auxiliary Feedwater Pump Rupture Disk Gasket	07/15/2021
	Corrective Action Documents	501000055190	D2 Starting Valve PMT Inadequate	08/17/2021
	Procedures	SP 1102	11 Turbine Driven AFW Pump Quarterly Test	116
	Work Orders	7650000020	PMT: 11 TD AFW PMP Rupture Disk Replacement	05/27/2021
		7650000030	Replace SV-33696 (PMT)	09/23/2021
		7650100030	Replace SV-33829 (PMT)	09/23/2021
71111.20	Miscellaneous	0707 202	PI-Out Print CSO Resource Ops (All)	09/07/2021
71111.20	Miscellaneous	0707 2021	2R32 Critical Path Schedule	09/07/2021
71111.22	Corrective Action Documents	501000005841	Elevated Unit 2 RCDT In-Leakage / 22 RCP 3rd Stage Seal Leakage	10/09/2020
	Drawings	X-HIAW-1-12	Waste Disposal System Flow Diagram	09/12/2014
	Miscellaneous	XH-1-38	Flow Diagram Chemical and Volume Control, Unit 1	84
	Procedures	H60	RCS Leakage Monitoring Program	4
		SP 1001A	Reactor Coolant System Leakage Test Manual Method	23
		SP 1001AA	Daily Reactor Coolant System Leakage Test	65
		SP 2094	Bus 25 Load Sequencer Test	40
		TP 1869	FLEX 300 KW Diesel Generator Test and Inspection	8
71124.08	Corrective Action Documents	501000022111	Water on Container in Area 19	01/19/2019
71124.08	Corrective Action Documents	501000023544	Lost Record for Radioactive Material Receipt	02/25/2019
71124.08	Corrective Action Documents	501000035117	NOS: PINGP RAM Shipment Admin Issues	11/25/2019
71124.08	Corrective Action Documents	501000046445	RAM Receipt Near Miss & Communication	11/16/2020
71124.08	Corrective Action Documents	501000046596	Concern with Vendor Document	11/20/2020
71124.08	Corrective Action Documents	501000050178	Corrosion on 55 Gallon Drum in RWB	04/07/2021
71124.08	Corrective Action	501000053704	PING 1200 Discrepancy from Site Process	06/30/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents Resulting from Inspection			
71124.08	Miscellaneous		Replacement Steam Generator Building Radioactive Inventory	06/29/2021
71124.08	Miscellaneous		Radioactive Material Transportation Training Records	Various
71124.08	Miscellaneous	L80360	10 CFR 61 Analysis of Filter Media	09/18/2018
71124.08	Miscellaneous	L91482-1	10 CFR 61 Analysis of Primary Bead Resin	03/09/2021
71124.08	Miscellaneous	PI19-HLF-TB	10 CFR 61 Analysis for High Activity Filters	10/02/2019
71124.08	Miscellaneous	PING-18-HLR-TB	10 CFR 61 Analysis of Bead Resin	12/15/2018
71124.08	Procedures	D59	Process Control Program for Processing/Dewatering of Radioactive Waste from Liquid Systems	12
71124.08	Procedures	FP-RP-RW-02	Radioactive Shipping Program	23
71124.08	Procedures	FP-RP-RW-03	10CFR37 Material Accountability	2
71124.08	Procedures	RPIP 1330	Satellite RCA Process	13
71124.08	Shipping Records	19-018	Radioactive Waste Shipment of Bead Resin	08/07/2019
71124.08	Shipping Records	20-005	Radioactive Waste Shipment Containing Filters	07/07/2020
71124.08	Shipping Records	20-049	Radioactive Material Shipment of Refueling Outage Equipment	10/12/2020
71124.08	Shipping Records	21-012	Radioactive Waste Shipment of Bead Resin	05/25/2021
71124.08	Work Orders	700064392	Annual Radioactive Source Inventory/Leak Test	08/17/2020
71151	Miscellaneous	MSPI Data	Emergency AC Systems	09/21/2021