



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

August 9, 2021

Mr. David Rhoades
Senior VP, Exelon Generation Co., LLC
President and CNO, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

**SUBJECT: DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3 – INTEGRATED
INSPECTION REPORT 05000237/2021002 AND 05000249/2021002**

Dear Mr. Rhoades:

On June 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Dresden Nuclear Power Station, Units 2 and 3. On July 7, 2021, the NRC inspectors discussed the results of this inspection with Mr. P. Karaba, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

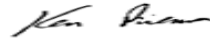
One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

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 Dresden Nuclear Power Station, Units 2 and 3.

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 Dresden Nuclear Power Station, Units 2 and 3.

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 Riemer, Kenneth
on 08/09/21

Kenneth R. Riemer, Chief
Branch 1
Division of Reactor Projects

Docket Nos. 05000237 and 05000249
License Nos. DPR-19 and DPR-25

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

Letter to David Rhoades from Kenneth Riemer dated August 9, 2021.

SUBJECT: DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3 – INTEGRATED INSPECTION REPORT 05000237/2021002 AND 05000249/2021002

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

Docket Numbers: 05000237 and 05000249

License Numbers: DPR-19 and DPR-25

Report Numbers: 05000237/2021002 and 05000249/2021002

Enterprise Identifier: I-2021-002-0087

Licensee: Exelon Generation Company, LLC

Facility: Dresden Nuclear Power Station, Units 2 and 3

Location: Morris, IL

Inspection Dates: April 01, 2021 to June 30, 2021

Inspectors: M. Domke, Resident Inspector
G. Edwards, Health Physicist
A. Nguyen, Senior Resident Inspector
M. Porfirio, Illinois Emergency Management Agency
G. Roach, Senior Operations Engineer
L. Rodriguez, Project Engineer

Approved By: Kenneth R. Riemer, Chief
Branch 1
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 Dresden Nuclear Power Station, Units 2 and 3, 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 Prevent Water from Entering the Safety-Related Differential Pressure Switch, dPIS 2-0261-35E | | | |
| Cornerstone | Significance | Cross-Cutting Aspect | Report Section |
| Mitigating Systems | Green NCV 05000237,05000249/2021002-01 Open/Closed | [P.3] - Resolution | 71152 |
| A self-revealed Green finding and associated non-cited violation of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion III, Design Control, was identified for the failure to prevent water from entering the safety-related differential pressure switch, dPIS 2-0261-35E, that resulted in it failing to function during surveillance testing on April 14, 2021. Specifically, the licensee failed to correct known water intrusion onto the Unit 2 'A' reactor recirculation pump differential pressure switch, 2-0261-35E, from the Unit 2 East ECCS corner room cooler, which wetted the switch and caused internal corrosion and material deposits that prevented it from operating as designed (inoperable). | | | |

Additional Tracking Items

None.

PLANT STATUS

Unit 2 began the inspection period at rated thermal power. On May 11, 2021, the unit was taken off-line for forced outage, D2F60, to affect repairs to damaged cables related to the 2A and 2B reactor recirculation system. The unit commenced startup on May 16, 2021 and synched to the grid on May 17, 2021, exiting the forced outage, and reaching full thermal power later that day. Unit 2 remained at or near rated thermal power for the remainder of the inspection period.

Unit 3 began the inspection period at rated thermal power. On May 26, 2021, the unit commenced an emergency downpower to approximately 37 percent power to repair a leaking air line in the drywell related to the 'A' inboard Main Steam Isolation Valve. The unit returned to full rated thermal power on May 28, 2021 and remained at or near rated thermal power for the remainder of the inspection period.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors 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 onsite activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D; 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

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

- (1) The inspectors evaluated summer readiness for seasonal extreme weather conditions prior to the onset of hot temperatures for the following systems:

Auxiliary electrical equipment and battery rooms HVAC, ultimate heat sink, and the emergency diesel generators on May 25, 2021

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (4 Samples)

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

- (1) Unit 3 emergency diesel generator (EDG) post-maintenance alignment on April 22, 2021
- (2) Unit 2 shutdown cooling system during forced outage (D2F60) on May 12, 2021
- (3) 2/3 EDG alignment during automatic voltage regulator (AVR) troubleshooting on May 19, 2021
- (4) Reactor building closed cooling water (RBCCW) alignment during AVR troubleshooting on May 19, 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) FZ 8.2.6.C, Unit 2/3 lube oil reservoir area, elevation 534' and compensatory measures for fire hose stations out of service for fire piping replacement on April 26, 2021
- (2) Unit 2/3 crib house deluge out of service compensatory measures including fire watch observation on May 4, 2021
- (3) Compensatory measures for out of service fire protection equipment on Unit 2 during repairs in D2F60 on May 13, 2021
- (4) FZ 1.1.2.1, Unit 2 torus basement and torus catwalk, elevation 476' on June 7, 2021
- (5) FZ 8.2.5.A, Unit 2 switchgear and motor control center (MCC) elevation 517', Unit 2 trackway 517', Unit 2 condensate transfer pumps/hallway elevation 517', Unit 2 reactor feed pumps elevation 517' on June 8, 2021

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

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

- (1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification annual operating exam and comprehensive written exam administered to all licensed operators in May and June 2021

71111.11B - Licensed Operator Requalification Program and Licensed Operator Performance

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

- (1) Biennial Requalification Written Examinations

The inspectors evaluated the quality of the licensed operator biennial requalification written examination administered on May 27, 2021

Annual Requalification Operating Tests

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

Administration of an Annual Requalification Operating Test

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

Requalification Examination Security

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

Remedial Training and Re-examinations

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

Operator License Conditions

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

Control Room Simulator

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

Problem Identification and Resolution

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

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (2 Samples)

- (1) The inspectors observed and evaluated licensed operator performance in the control room for Unit 2 shutdown and startup activities during D2F60 on May 11, 2021 and May 16, 2021
- (2) The inspectors observed and evaluated licensed operator performance in the control room during the Unit 3 emergency downpower and subsequent power ascension due to a partially closed main steam isolation valve (MSIV) on May 27, 2021

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

- (1) The inspectors observed and evaluated licensed operators during a crew performance evaluation scenario in the main control room simulator on April 13, 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) Auxiliary electrical equipment room (AEER) HVAC system
- (2) 2B reactor recirculation pump trip on June 14, 2021

71111.13 - Maintenance Risk Assessments and Emergent Work Control

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

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

- (1) Elevated plant risk for various work windows for work week April 26, 2021 through April 30, 2021
- (2) Dry fuel storage campaign activities that involved elevated risk, multiple weeks in April through May 2021
- (3) Emergent troubleshooting and elevated risk due to 2A recirculation pump automatic speed drive (ASD) ground fault throughout the second quarter 2021
- (4) Emergent troubleshooting and elevated risk due to AVR not responding to voltage adjustments on May 19, 2021
- (5) Unit 2 shutdown safety during D2F60 from May 11, 2021 through May 15, 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) Historic operability review of the Unit 2 low pressure coolant injection (LPCI) loop select differential pressure switch (dPIS 2-0261-35E) that failed during surveillance testing
- (2) Unit 2 rod block monitor (RBM) quad trip card failure
- (3) Degraded ventilation seal identified on the Unit 2/3 EDG
- (4) Trip of the Unit 2 high pressure coolant injection (HPCI) pump during quarterly surveillance

71111.18 - Plant Modifications

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

The inspectors evaluated the following temporary or permanent modifications:

- (1) Temporary modification for new 2B recirculation pump motor ASD input cables on May 18, 2021
- (2) Permanent modification to replace the 2A recirculation pump motor ASD input cable on May 18, 2021
- (3) Unit 3 'A' MSIV air line permanent repair on June 10, 2021

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (5 Samples)

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

- (1) DOS 6600-01, Unit 3 emergency diesel generator post-maintenance test on April 22, 2021
- (2) Unit 2 reactor recirculation pump cable replacements per work orders (WO)
- (3) Unit 2 intermediate range monitor (IRM) 13 repair on May 14, 2021
- (4) Unit 2/3 'A' standby gas treatment (SBGT) cable replacement
- (5) Unit 3 component cooling service water (CCSW) vault check valve, 3-4999-75, replacement per WO 1617519

71111.20 - Refueling and Other Outage Activities

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

- (1) The inspectors evaluated the Unit 2 forced outage, D2F60, from May 11, 2021 through May 16, 2021

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (2 Samples)

- (1) DIS 1500-32, Unit 2 Division I LPCI ECCS Loop Selection Circuitry Logic System Function Test on April 14, 2021
- (2) DOS 660-08, emergency diesel generator cooling water (EDGCW) pump quarterly and comprehensive in-service test on June 9, 2021

Inservice Testing (IP Section 03.01) (1 Sample)

- (1) DOS 1400-05, Unit 2 core spray (CS) system comprehensive pump test with torus available (IST) on April 27, 2021

FLEX Testing (IP Section 03.02) (1 Sample)

- (1) DOS 0010-50, diesel driven FLEX equipment surveillances on May 25, 2021

71114.06 - Drill Evaluation

Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (2 Samples)

- (1) Second quarter 2021 Dresden focus area emergency preparedness drill on May 6, 2021
- (2) Dresden off-year emergency preparedness exercise on June 15, 2021

RADIATION SAFETY

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Walkdowns and Observations (IP Section 03.01) (3 Samples)

The inspectors evaluated the following radioactive effluent systems during walkdowns:

- (1) Unit 2/3, advanced liquid processing system (ALPS)
- (2) Unit 2/3, turbine building ventilation system discharge to main plant vent chimney
- (3) Unit 2/3, service water monitor

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

- (1) Inspectors evaluated effluent samples from the Unit 2/3 chimney exhaust
- (2) Inspectors evaluated effluent samples from Unit 2/3 reactor building vent
- (3) Inspectors evaluated effluent samples from the low-pressure coolant injection heat exchangers

Dose Calculations (IP Section 03.03) (2 Samples)

The inspectors evaluated the following dose calculations:

- (1) Gaseous release discharge permit from Unit 2/3 chimney in January 2021
- (2) Gaseous release discharge permit from Unit 2/3 reactor building in February 2021

Abnormal Discharges (IP Section 03.04) (1 Sample)

The inspectors evaluated the following abnormal discharges:

- (1) Groundwater from the west tritium remediation well which is monitored via the Unit 2/3 discharge tunnel

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

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

- (1) Inspectors evaluated the licensee's performance in controlling, labelling, and securing radioactive materials. This included the radioactive waste storage portion of the facility.

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. This included the condensate resin waste stream at the facility.
- (2) The inspectors evaluated the licensee's characterization and classification of radioactive waste. This included the dry activated waste (DAW) stream at the facility.

Shipment Preparation (IP Section 03.04) (1 Sample)

- (1) The inspectors observed that a shipment containing radioactive material was prepared according to requirements. The shipment identification number was DW-21-011 for an LSA-II shipment of bead resin from the spent fuel pool.

Shipping Records (IP Section 03.05) (3 Samples)

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

- (1) Shipment DW-21-011 for an LSA-II shipment of bead resin from the spent fuel pool
- (2) Shipment DW-20-001 for an LSA-II shipment of condensate resin pre-filters
- (3) Shipment DW-20-026 for an LSA-II shipment of Unit 2/3 dry activated waste (DAW)

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 2 (April 1, 2020 through March 31, 2021)
- (2) Unit 3 (April 1, 2020 through March 31, 2021)

MS07: High Pressure Injection Systems (IP Section 02.06) (2 Samples)

- (1) Unit 2 (April 1, 2020 through March 31, 2021)
- (2) Unit 3 (April 1, 2020 through March 31, 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 water leakage and safety related SSCs that might be indicative of a more significant safety issue.

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) Multiple failures and out of tolerance surveillance tests due to water intrusion for the Unit 2 and 3 LPCI loop selection logic differential pressure switches
- (2) Leak-by on the Unit 3 'D' CCSW discharge check valve
- (3) Deficiencies identified in implementation of the scaffold control program

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

Event Follow-Up (IP Section 03.01) (2 Samples)

- (1) The inspectors evaluated a trip of the Unit 2 'B' reactor recirculation pump and the licensee's response to operating in Single Loop Operations from May 8, 2021 through May 10, 2021
- (2) The inspectors evaluated the Unit 3 AVR going into discharge mode (locking out) and the licensee's response to this issue from May 18, 2021 through May 20, 2021

INSPECTION RESULTS

| Failure to Prevent Water from Entering the Safety-Related Differential Pressure Switch, dPIS 2-0261-35E | | | |
|--|--|-----------------------|----------------|
| Cornerstone | Significance | Cross-Cutting Aspect | Report Section |
| Mitigating Systems | Green NCV 05000237,05000249/2021002-01 Open/Closed | [P.3] - Resolution | 71152 |
| A self-revealed Green finding and associated non-cited violation of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion III, Design Control, was identified for the failure to prevent water from entering the safety-related differential pressure switch, dPIS 2-0261-35E, that resulted in it failing to function during surveillance testing on April 14, 2021. Specifically, the licensee failed to correct known water intrusion onto the Unit 2 'A' reactor recirculation pump differential pressure switch, 2-0261-35E, from the Unit 2 East ECCS corner room cooler, which wetted the switch and caused internal corrosion and material deposits that prevented it from operating as designed (inoperable). | | | |
| <u>Description:</u> On April 14, 2021, during performance of DIS 1500-32, "Division I Low Pressure Coolant Injection ECCS Loop Selection Circuitry Logic System Functional Test," LPCI loop select logic relay, 2-1530-271, failed to drop out when required. Investigation into this condition | | | |

revealed that dPIS 2-0261-35E, the Unit 2 'A' reactor recirculating pump differential pressure switch, failed to drop out (return to its original state) during the surveillance test. The licensee was already in the applicable technical specification (TS) limiting condition for operation (LCO), 3.3.5.1, due to the surveillance test. This is a 24-hour action statement. The licensee replaced the switch and exited the LCO the next day. It was determined that the switch failed due to moisture intrusion causing corrosion deposits to form and affect the switch operation. The moisture came from leakage from the Unit 2 room cooler which is directly above the instrument rack where this switch (and three others for this division of logic) are mounted. A historical operability evaluation was completed under AR 4423697 which determined that even though the dPIS was not functional, there was no loss of safety function for the LPCI system Division I loop select logic since there were three other switches that provided redundant design functions to this switch. These switches successfully passed the surveillance test. The last successful completion of the quarterly functional surveillance test for dPIS 2-0261-35E was on March 15, 2021.

The inspectors reviewed the corrective action program (CAP) history of dPIS 2-0261-35E and noted multiple action requests, beginning in October 2015, that documented moisture intrusion related to this safety-related switch. In October 2015 and May 2017, during quarterly functional testing, moisture and mineral deposits were found inside this switch. In both cases, the switch met the Technical Specification requirements of the test and the internals were cleaned to remove the moisture/deposits. Also, in both instances, water was noted to be dripping from the room cooler above the instrument rack and varying catch container configurations were arranged to divert the leakage away from the rack. Leakage from this room cooler had been documented in CAP since at least 2008. The work order to replace the internal cooling coil (the ultimate fix) is still open (currently scheduled for the 2021 refueling outage if it occurs).

The inspectors also reviewed the CAP for instances of moisture intrusion into the other switches (dPISs 2-0261-35A/C/G) on this rack on Unit 2 and the same instrumentation rack on Unit 3. The configuration for the Unit 3 East ECCS corner room is the same as Unit 2, which is the room cooler directly above the instrument rack where dPISs 3-0261-35A/C/E/G are located. For Unit 2, the 'A' switch had two instances (2015 and 2018) where it was identified as being out of tolerance for the testing criteria. This switch has not been replaced and no work has been done on it. The 'C' switch had one instance of being found out of tolerance (2020) and it was replaced with a new model of Barton switch. This switch was found to have moisture intrusion that caused internal corrosion (ARs 4367045 and 4400499).

On Unit 3, dPIS 3-0261-35C was determined to be non-functional when it failed to change state during the logic system functional test in September 2019. A corrective action program evaluation (CAPE) was completed for this failure and determined that the Unit 3 East corner room cooler leaked onto this switch, causing internal moisture buildup and degradation of the switch, eventually leading to its failure. Corrective actions from this event included replacing the switch with a newer model Barton switch which was determined to be less susceptible to water intrusion (better seal) and correcting the leakage from the Unit 3 room cooler, which was accomplished in April 2021 by replacing the cooler coil. Engineering Changes (ECs) were initiated for all older Barton switches (the four per unit listed above as well as four more per unit that are on racks not located under the room coolers) to change them out to the newer models. These ECs were never scheduled for work but rather were coded as "contingencies" if a switch were to fail (see example above on 2-0261-35C). No actions were taken as extent-of-condition to address the leakage on the Unit 2 room cooler.

As part of their in-depth review, the inspectors reviewed the design documentation related to the dPISs to determine the appropriate operating environment. The licensee's Environmental Qualification document showed that these switches were not designed to be used in wet environments. This was supported by the licensee's proposed corrective actions from the 2019 event to replace the old-style switch with a newer model that was less susceptible to water intrusion. Based on this information, it was reasonable to conclude that these switches were not anticipated to be subjected to wet conditions, and that the licensee failed to correct this condition in a prompt manner when it occurred.

Corrective Actions: The licensee replaced dPIS 2-0261-35E on April 15, 2021, with the newer style Barton switch. The licensee also generated ARs 4418395 and 4418398 for the extent of condition replacement of dPISs 2-0261-35A and 2-0261-35G with the newer style Barton switch. Repairs to the Unit 2 East ECCS corner room cooler are scheduled for D2R27 in November 2021

Corrective Action References: AR 4416605, DIS 1500-32: Relay 2-1530-271 Not Dropped Out

Performance Assessment:

Performance Deficiency: The inspectors determined that the licensee failed to prevent water from entering the safety-related differential pressure switch, dPIS 2-0261-35E, as required by 10 CFR 50 Appendix B, Criterion III, that resulted in it failing to function during surveillance testing on April 14, 2021.

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, failure to prevent moisture intrusion into this switch resulted in its inoperability and failure to perform its design function.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors screened the issue using IMC 0609, Appendix A, Exhibit 2, Mitigating Systems Screening Questions, and determined that this finding was of very low safety significance, or Green, since it did not represent the loss of the PRA function of any TS train of equipment or system. The Unit 2 Division I LPCI Loop Selection function was still maintained by the three other differential pressure switches that passed the surveillance test.

Cross-Cutting Aspect: P.3 - Resolution: The organization takes effective corrective actions to address issues in a timely manner commensurate with their safety significance. Specifically, the licensee had multiple opportunities to take appropriate actions to correct identified moisture intrusion into the differential pressure switches from the unit corner room coolers to ensure continued operability of these safety-related components. The licensee did not properly resolve moisture intrusion and degradation of the 2-0261-35E switch when identified during TS surveillance testing in 2015 and 2017. Also, the 2019 CAPE for failure of the 3-0261-35C switch did not perform a thorough extent of condition evaluation to address leakage from the Unit 2 East ECCS corner room cooler or appropriately prioritize actions to address the moisture intrusion into the other dPISs.

Enforcement:

Violation: Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion III, Design Control, requires, in part, that measures be established for the selection and review for suitability of application of materials, parts, equipment, and processes that are essential to the safety-related functions of the structures, systems, and components. Contrary to the above, from October 30, 2015 to April 14, 2021, corrective action program documentation has shown that water intrusion has occurred into the Unit 2 'A' reactor recirculation pump differential pressure switch (dPIS), 2-0261-35E, from the Unit 2 East ECCS corner room cooler. This eventually resulted in the inoperability of the dPIS when it failed to function due to internal corrosion and material deposits buildup during surveillance testing on April 14, 2021.

Design documentation review identified that these switches were not designed to be in wetted environments. Corrective action program documentation review found that this issue was previously identified by the licensee and corrective actions were not promptly taken to appropriately resolve the issue as an extent of condition action from prior failures.

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

Observation: NRC-Identified Trend for Water Leaks Causing Failure, Degradation, or Abnormal Manipulation of Components

71152

The inspectors performed a semiannual review of issues entered into the corrective action program (CAP) and a cognitive review of plant walkdown observations over the period of January 1, 2021 to June 30, 2021, to identify any potential trends that might indicate the existence of a more significant safety issue. Based on these reviews, the inspectors concluded that there was a negative trend in the licensee addressing water leakage onto components that resulted in their failure, degradation, or abnormal manipulation. Specifically, there were a number of issues where safety-related and important to safety equipment needed to be emergently removed from service or manipulated in a manner outside its normal operational state to prevent adverse consequences from water intrusion. Also, some examples were identified where plant personnel needed to take prompt actions to prevent unanticipated water intrusion onto equipment. Finally, some of these examples required prompt determinations that the components could still perform their design and/or safety functions. Examples of these issues, and their associated CAP documents, are listed below:

- IR 4244414, Unexpected Alarm in Main Control Room due to Unit 3 HPCI Minimum Flow Valve Opening,
- IR 4412599, Degraded Piping off of the Unit 2 ECCS Jockey Pump,
- IR 4395944, Leak onto 2A CRD Pump from Fire Header Leak,
- IR 4393484, Excessive In-Leakage onto 3C Circulating Water Pump MOV,
- IR 4352983, Corrosion on TBCCW Supply to Unit 2 Circulating Water Pumps,
- IR 4335087, Conduit Rusted for Cabling into the 2202-19A Rack,
- IR 4324368, Operations to Evaluate Disabling HPCI Fire Protection Pre-Action System, and
- Issues with Leakage from the ECCS Corner Room Coolers onto the LPCI dPIS Racks (NCV 05000237,05000249/2021002-01)

Through their review of the associated CAP documentation and by performing independent walkdowns, the residents determined that the impact of water leakage was not always thoroughly and rigorously evaluated. Sometimes the scope of evaluation of the issue was narrowly focused on the immediate impact to the system that had the leak and not necessarily on equipment/components in the surrounding area that were impacted (or potentially impacted) by water from the leak. Also, it was noted that some leaks have existed for a prolonged period of time. The cumulative impact of water intrusion onto components from these leaks has not been fully evaluated. The residents also questioned the promptness of resolution of some of these issues. This is especially evident lately as some of the items have led to more safety significant issues. The residents discussed these observations with the licensee, and they are revising their action plan to address water leakage.

| | |
|---|-------|
| Observation: Scaffolding Program Procedure Use | 71152 |
| <p>The inspectors performed a semiannual review of issues entered into the corrective action program (CAP) and a cognitive review of plant walkdown observations over the period of January 1, 2021 to June 30, 2021, to identify any potential trends that might indicate the existence of a more significant safety issue. Based on these reviews, the inspectors concluded that there was a negative trend in the licensee addressing scaffolding installation, inspection, modification, and removal processes. Specifically, scaffolding status logs maintained by coordination personnel did not accurately reflect scaffolding erected within the plant. Contractor-erected scaffold logs were not shared with permanent scaffold coordinators because, according to interviews, the contractor logs were considered proprietary as they contained sensitive billing rate information. Interviews also indicated the contractor-to-station turnover of scaffolding status was controlled by action request generation, but documentation reviews for the retrieved instances of this turnover stemmed from refueling outage periods and not, for example, forced outage periods where contractors also constructed scaffolding.</p> <p>Inspector field assessments and document reviews revealed instances of scaffolding unaccounted for by logs or instances of misclassified permanent scaffolds as temporary. Inspectors identified various instances of non-permanent scaffolds left in-plant after scheduled work was completed which conflicts with procedure guidance.</p> <p>Scaffolding program adherence observations indicate issues are administrative. Field assessments did not reveal any instances of improper bracing to SSC or seismic-related concerns, fire protection or safe-shutdown impairments, or impedance for SSC to perform their design functions. The station is tracking completion of scaffolding observations by AR 04429936.</p> | |

EXIT MEETINGS AND DEBRIEFS

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

- On July 7, 2021, the inspectors presented the integrated inspection results to Mr. P. Karaba, Site Vice President, and other members of the licensee staff.
- On June 2, 2021, the inspectors presented the Biennial Licensed Operator requalification inspection exit meeting inspection results to Mr. P. Karaba, Site Vice President, and other members of the licensee staff.
- On June 11, 2021, the inspectors presented the Radiation Protection inspection results to Mr. P. Boyle, Plant Manager, and other members of the licensee staff.

DOCUMENTS REVIEWED

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date | |
|----------------------|-----------------------------|--|---|------------------------------------|----|
| 71111.01 | Corrective Action Documents | 4425411 | Transformer 27 Temporary Oil Repair on Southeast Cooling Banks Degraded | 05/24/2021 | |
| | | 4426433 | Cottonwood Buildup on Transformer 3 | 05/29/2021 | |
| | | 4427803 | Elevated Transformer 3 Oil Temps due to Buildup on Oil Coolers | 06/06/2021 | |
| | | 4427804 | Transformer 81 Minor Trouble Alarm and Cooler Fail Alarm | 06/06/2021 | |
| | | 4429043 | Unit 3 Battery Room High Temperature | 06/12/2021 | |
| | | 4429545 | Cottonwood and Dust Accumulation for AEER HVAC System | 06/15/2021 | |
| | | 4430433 | DOA 0010-02 Entry | 06/20/2021 | |
| | Procedures | DOA 0010-02 | Tornado Warning/Severe Winds | 25 | |
| | | DOP 4450-08 | Dresden Cooling Lake Operation | 35 | |
| | | OP-AA-108-107-1001 | Station Response to Grid Capacity Conditions | 08 | |
| | | OP-DR-108-111-1001 | Hot Weather Strategy | 07 | |
| | 71111.04 | Procedures | DOP 1000-E1 | Unit 2 Shutdown Cooling Electrical | 03 |
| | | | DOP 6600-E1 | Unit 3 Standby Diesel Generator | 07 |
| 71111.05 | Corrective Action Documents | 4428453 | IEMA Identified Issue with High Rise Pack Implementation | 06/09/2021 | |
| | Fire Plans | 138 U2TB-41 | FZ 8.2.5A Unit 2 High Pressure Heaters/Steam Lines Elevation 517' | 03 | |
| | | 139 U2TB-42 | FZ 8.2.5A Unit 2 Reactor Feed Pumps Elevation 517' | 02 | |
| | | 141 U2T-44 | FZ 8.2.5A Unit 2 Condensate Transfer Pumps/Hallway Elevation 517' | 02 | |
| | | 142 U2TB-45 | FZ 8.2.5A Unit 2 Trackway Area Elevation 517' | 04 | |
| | | 144 U2TB-47 | FZ 8.2.5A Unit 2 Switchgear & MCC Elevation 517' | 04 | |
| | | FZ 1.1.2.1 | Unit 2 Torus Basement and Torus Catwalk, Elev. 476' | 04 | |
| | | FZ 8.2.6.C | Unit 2/3 Lube Oil Reservoir Area, Elev. 534' | 03 | |
| Miscellaneous | Fire Impairment 21-056 | Fire Protection Out of Service, Turbine Building | 05/11/2021 | | |
| 71111.11B | Corrective Action | IR 04268169 | NRC Questions in MCR Simulator During NRC EP Exercise | 07/30/2019 | |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|----------------------|---------------------|-------------|---|--------------------------|
| | Documents | IR 04286723 | NOS ID: Active License Holder Did Not Sign Reactivation Log | 10/10/2019 |
| | | IR 04297448 | NRC Question on Continuing to Run Recirc During Mode 2 | 11/14/2019 |
| | | IR 04339885 | 4.0 Critique – U2 Restoration from Single Loop Operation | 04/30/2020 |
| | | IR 04394393 | Ops Crew 3 Clock Reset | 01/07/2021 |
| | | IR 04412353 | TRNG: NRC Pre-71111.11 Inspection Report Findings | 03/29/2021 |
| | | IR 04421965 | LORT DEP Failure on Declaration | 05/06/2021 |
| | Engineering Changes | EC 627506 | Hydrogen Cooler Temperature Controller Replacement in Simulator | 09/10/2020 |
| | | EC 631456 | Time Delays on 902-4 G3 and G7 Annunciators in Simulator | 05/18/2020 |
| | Miscellaneous | | 2019 NRC Comprehensive Biennial Written Examination - RO Week 1 | 05/01/2019 |
| | | | 2018-2021 Watch Standing Records for Crew 3 | 05/24/2021 |
| | | | D2C27 Core Load Test | 12/13/2019 |
| | | | 2019 LORT Training Attendance Records | 12/31/2019 |
| | | | 2020 LORT Training Attendance Records | 12/31/2020 |
| | | | 2021 LORT Training Attendance Records | 03/31/2021 |
| | | | Individual SRO Accelerated Requalification Plan | 01/01/2021 |
| | | | 2021 Comprehensive NRC Written Exam - RO Week 5 | 05/27/2021 |
| | | | 2021 Comprehensive NRC Biennial Written Examination - SRO Week 5 | 05/27/2021 |
| | | | 2019 Comprehensive NRC Biennial Written Examination - SRO Week 1 | 05/01/2019 |
| | | | 2019 LORT NRC Exam Week 6 – RO - Completed RO Written Exam for Individual | 05/09/2019 |
| | | | 2019 LORT NRC Exam Week 6 – RO – Completed Written Exam Retake for Individual | 05/23/2019 |
| | | | 00701597 Dresden Training Simulator Cycle 27 Core Update | 08/29/2019 |
| | | | Biennial Physical Examination and SRO/RO Medical Records | 05/25/2021 |
| | | | OPEX-AW | Simulator Exercise Guide |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|----------------------|------|------------------------|---|------------------|
| | | OPEX-I | Simulator Exercise Guide | 13 |
| | | OPEX-O | Simulator Exercise Guide | 13 |
| | | OPEX-P | Simulator Exercise Guide | 14 |
| | | P2-1100-03 | In Plant JPM | 15 |
| | | P2-6400-01 | In Plant JPM | 3 |
| | | P2-6600-02 | In Plant JPM | 15 |
| | | P3-0202-1 | In Plant JPM | 16 |
| | | S-0700-13 | Simulator JPM | 4 |
| | | S-1300-04 | Simulator JPM | 2 |
| | | S-2300-07 | Simulator JPM | 4 |
| | | S-5370-01 | Simulator JPM | 0 |
| | | S-AR-03 | Admin JPM | 3 |
| | | S-EP-22 | Admin JPM | 6 |
| | | S-RD-01 | Admin JPM | 3 |
| | | Scenario Based Testing | 2019 NRC Graded Emergency Preparedness Exercise | 05/08/2019 |
| | | Scenario Based Testing | Simulator Dynamic Scenario LORT NRC Annual Operating Test – OPEX AS | 03/30/2020 |
| | | TA-AA-155-F05 | Simulator Evaluation Form for Crew – Crew 3 AM – LORT CYCLE 2019-2021 Cycle 11 | 05/26/2021 |
| | | TQ-AA-150-F03A | RE-EVALUATION: JPM Evaluation Results | 05/24/2019 |
| | | TQ-AA-150-F03A | JPM Evaluation Results | 05/10/2019 |
| | | TQ-AA-155-F04 | Simulator Evaluation Form for Individuals – Crew 3 AM – LORT Cycle 2019-2021 Cycle 11 | 05/26/2021 |
| | | TQ-AA-155-F04 | Simulator Evaluation Forms for Individuals – Crew 3 PM – LORT Cycle 2019-2021 Cycle 11 | 05/26/2021 |
| | | TQ-AA-155-F05 | Simulator Evaluation Form for Crew – Crew 3 PM – LORT Cycle 2019-2021 Cycle 11 | 05/26/2021 |
| | | TQ-AA-224-F090 | Failure of NRC Biennial Written Examination | 05/12/2021 |
| | | TQ-AA-224-F090 | Performance Review Committee Data Sheet – LORT Biennial Written and Annual JPM Exam Failure – 2019 LORT NRC Exam/JPMs Week 4 – RO | 05/16/2019 |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|----------------------|-----------------------------|-------------------------------------|--|------------------|
| | | TQ-AA-224-F100 | Remedial Training Notification and Action on Failure for an Individual – 2019 LORT NRC Exam/JPMs Week 4 – RO | 05/09/2019 |
| | | TQ-AA-224-F100 | Remedial Training Notification and Action on Failure | 05/09/2019 |
| | | TQ-AA-306-F-02 | Simulator Review Board Minutes | 12/31/2019 |
| | | TQ-AA-306-F-02 | Simulator Review Board Minutes | 03/27/2020 |
| | | TQ-AA-306-F-02 | Simulator Review Board Minutes | 07/10/2020 |
| | | TQ-AA-306-F-02 | Simulator Review Board Minutes | 03/12/2021 |
| | | TQ-AA-306-F-02 | Simulator Review Board Minutes | 09/05/2020 |
| | | TQ-AA-306-F-03 | Steady State Testing for D2C27 | 04/29/2020 |
| | | TQ-AA-306-F-03 | Transient Testing for D2C27 | 04/29/2020 |
| | Self-Assessments | IR 4301168 | Pre-NRC 71111.11 Licensed Operator Requalification Program and Licensed Operator Performance | 02/27/2020 |
| | | IR 4403204-02 | Pre-NRC 71111.11 Licensed Operator Requalification Program and Licensed Operator Performance | 04/08/2021 |
| | | NOSA-DRE-19-08 | Operations Functional Area Audit Report | 10/16/2019 |
| | | NOSA-DRE-20-07 | Training and Staffing Audit Report | 06/10/2020 |
| | Work Orders | SWR 0135166 | 2A Reg. Valve Reset Pushbutton Does Not Consistently Work | 04/15/2019 |
| | | SWR 0135178 | Recorder Clear | 04/18/2019 |
| | | SWR 0135422 | Drywell Pressure Response During High Torus/Drywell Temperatures | 07/30/2019 |
| | | SWR 0135455 | ASD Fault Reset is Not Modeled Correctly | 08/14/2019 |
| | | SWR 0136184 | SRM Indication Discrepancy | 06/19/2020 |
| | | SWR 0136211 | SBLC Computer Switch Command Does Not Work Properly | 06/29/2020 |
| | | SWR 136372 | Fuel Pool Cooling Pump Trip Intermittent | 08/28/2020 |
| SWR 136769 | | Electrical Overcurrent Malfunctions | 02/13/2021 | |
| 71111.11Q | Corrective Action Documents | 4423096 | LPRM 16-41 'C' Downscale Light | 05/11/2021 |
| | | 4427175 | D2F60 Operations Startup Critique | 05/16/2021 |
| 71111.12 | Corrective Action Documents | 4351928 | 2/3 'B' AEER A/C Compressor Trip | 06/22/2020 |
| | | 4357050 | AEER Air Conditioner Compressor Trip | 07/16/2020 |
| | | 4392247 | AEER Air Conditioner Compressor Trip | 12/27/2020 |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|----------------------|-----------------------------|--|---|-------------------------|
| | | 4394945 | 2/3-57214B-B, AEER A/C RCU Compressor 'B' Tripped | 01/09/2021 |
| | | 4399725 | 2/3-57214B-B, AEER A/C RCU Compressor 'B' Tripped | 02/02/2021 |
| | | 4400863 | AEER HVAC Compressor Trip | 02/07/2021 |
| | | 4410467 | AEER HVAC Compressor Trip | 03/21/2021 |
| | | 4411622 | Trend IR: 'B' AEER HVAC Compressor Trips | 03/25/2021 |
| | | 4411622 | Trend IR: 'B' AEER HVAC Compressor Trips | 03/25/2021 |
| | | 4422420 | 2B Reactor Recirc Pump Trip | 05/08/2021 |
| | Engineering Evaluations | | (a)(1) Determination Evaluation for Maintenance Rule Function 5714 | 00 |
| 71111.13 | Corrective Action Documents | 4413041 | 2A Recirculation Drive Minor Trouble | 03/31/2021 |
| | | 4414920 | 2A Recirculation Drive Minor Trouble Alarm | 04/08/2021 |
| | | 4416293 | 2A Recirc Drive Minor Trouble | 04/14/2021 |
| | | 4417425 | 2A Recirc Drive Minor Trouble | 04/18/2021 |
| | | 4421564 | Unexpected Alarm 902-4 B-1, 2A Recirculation Drive Minor Trouble | 05/04/2021 |
| | Operability Evaluations | DRE-2-2021-0108 | Operational Decision Matrix for 2A ASD Output Ground Voltage | 01 |
| | Procedures | DFP 0800-69 | Hi-TRAC Movement Within the Unit 2/3 Reactor Building | 42 |
| | | DFP 0800-74 | Helium Cooldown System Operation and MPC Reflood | 06 |
| | | DMP 5800-18 | Load Handling of Heavy Loads and Lifting Devices | 31 |
| | | OP-AA-108-117 | Protected Equipment Lists for Various On-Line Plant Configurations | 04/01/2021 - 06/31/2021 |
| | | OP-AA-108-117 | Protected Equipment Lists for Shutdown Safety, D2F60 | 05/11/2021 - 05/15/2021 |
| | | OU-DR-104 | Shutdown Safety Management Program | 23 |
| | WC-DR-104-1001 | Dresden 345kV Switchyard Configuration Risk Assessment | 08 | |
| 71111.15 | Corrective Action Documents | 4415618 | No Light Indication for LPRM 2-0756-501L Detector 'C' when Bypassed | 04/10/2021 |
| | | 4418952 | Unit 2 RBM 7 Power Pot would not go to 0V DC | 04/26/2021 |
| | | 4423697 | Historical Operability Evaluation for DPIS 2-0261-35E | 05/14/2021 |
| | | 4425527 | Sealant Around 2/3 EDG Vent Requires Replacement | 05/25/2021 |
| | | 4430004 | HPCI Trip during Quarterly Surveillance | 06/17/2021 |
| | | 4430857 | DW Temps TE 3-5741-12A and TE 3-1053-B above EQ | 06/22/2021 |

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|----------------------|-----------------------------|---------------|--|------------------|
| | | | Limits | |
| | Drawings | M-26, Sheet 2 | Diagram of Nuclear Boiler and Reactor Recirculating Piping | KV |
| | Procedures | DIS 0700-08 | Rod Block Monitor Calibration Test | 45 |
| | | DTS 1600-38 | Drywell EQ Temperature Monitoring | 06 |
| 71111.18 | Engineering Changes | 634272 | 2A Reactor Recirc Motor ASD Output Cables | 00 |
| | | TCCP 634252 | TCCP for 2B Reactor Recirc Motor ASD Input Cables | 00 |
| 71111.19 | Corrective Action Documents | 4423001 | IRM 13 Failed | 05/11/2021 |
| | | 4423863 | Unexpected Alarm: 902-4 E-5, 2A Recirculation Pump Temperature High | 05/16/2021 |
| | | 4423961 | IRM 13 Off-Scale High | 05/16/2021 |
| | Work Orders | 05141167-28 | EM & Vendor Cable Testing 22269, 22272, 22277, 22253 | 05/16/2021 |
| | | 05141167-50 | CE Install Replacement Cable 20502 per EC 634272 | 05/15/2021 |
| | | 05141167-68 | CE Repairs of Damaged Cable Jackets in Trays | 05/15/2021 |
| | | 05141167-72 | EM Tan Delta Testing Replacement Cable 2A ASD CA20502 | 05/15/2021 |
| | | 05150956-01 | EWP EMD Perform Megger Test of 2B Reactor Recirculation Pump 4kV Feed Cables | 05/16/2021 |
| | | 05150956-05 | EWP EM Vendor Cable Diagnostics | 05/10/2021 |
| | | 5115618 | IRM 13 Failed Upscale | 05/14/2021 |
| 71111.20 | Corrective Action Documents | 4423129 | Unexpected Alarms due to IRM 15 Spiking | 05/12/2021 |
| | | 4423174 | Extraction MOV 2-3101-A will not go Closed | 05/12/2021 |
| | | 4423219 | Control Valve #1 Servo Cable Replacement Needed | 05/12/2021 |
| | | 4423221 | Control Valve #3 LVDT #1 Cable Replacement Needed | 05/12/2021 |
| | | 4423222 | Control Valve #3 LVDT #2 Cable Replacement Needed | 05/12/2021 |
| | | 4423223 | Control Valve #3 LVDT #3 Cable Replacement Needed | 05/12/2021 |
| | | 4423240 | Unexpected Alarm: 902-8 C-9, Unit 2 125V DC Battery Ground | 05/12/2021 |
| | | 4423256 | M-13 Unable to Withdraw | 05/12/2021 |
| | | 4423470 | Normal Level Control Valve for 3B2 Heater | 05/13/2021 |
| | | 4423690 | Recommend 345kV Line 1221 Disconnect Repair in D2F60 | 05/14/2021 |
| | | 4423808 | Unit 2 Control Valve #2 Servo Output Current Discrepancy | 05/15/2021 |
| | | 4423815 | NRC Question Unit 2 Reactor Recirculation Pump Discharge Valve Packing Leaks | 05/15/2021 |
| | | 4423874 | Entered DOA 0010-21, High Condensate Pump Discharge | 05/16/2021 |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|----------------------|---|-----------------------------|---|---|
| | | | Conductivity | |
| 71111.22 | Corrective Action Documents | 4349768 | FLEX Diesel Samples Out of Specification | 06/11/2020 |
| | | 4416605 | DIS 1500-32: Relay 2-1503-271 Not Dropped Out | 04/14/2021 |
| | | 4419492 | 2B Core Spray Flow Differences Between Edgewise and Computer | 04/27/2021 |
| | | 4427252 | FLEX Flood Pumps A and B Diesel Fuel Failed Sample Testing | 06/02/2021 |
| | Procedures | CC-AA-118 | Diverse and Flexible Coping Strategies (FLEX), Spent Fuel Pool Instrumentation (SFPI), and Hardened Containment Vent System (HCVS) Program Document | 06 |
| | | DIS 1500-32 | Division I Low Pressure Coolant Injection ECCS Loop Selection Circuitry Logic System Functional Test | 15 |
| | | DOS 0010-50 | Diesel Driven FLEX Equipment Surveillances | 01 |
| | | DOS 6600-08 | Diesel Generator Cooling Water Pump Quarterly and Comprehensive/Preservice Test for Operational Readiness and In-Service Test Program | 66 |
| | Work Orders | 457636 | Contingency Work Order for Failed dPIS 2-0261-35E | 04/15/2021 |
| | | 4917683 | Unit 2 Technical Specification Core Spray Comprehensive Pump Test with Torus Available | 04/27/2021 |
| | | 5055953 | FLEX Diesel Flood Pump 'A' | 05/25/2021 |
| | | 5059261 | FLEX Diesel Flood Pump 'B' | 05/25/2021 |
| | 71114.06 | Corrective Action Documents | 4430890 | MCR / Simulator Emergency Preparedness Pre-Exercise Lessons Learned |
| 4430897 | | | TSC Lessons Learned from EP Pre-Exercise | 06/22/2021 |
| 4430899 | | | OSC Lessons Learned from 2021 EP Pre-Exercise | 06/22/2021 |
| Miscellaneous | | | Dresden Off-Year Emergency Preparedness Exercise | 06/15/2021 |
| 71124.06 | Corrective Action Documents | AR 04356445 | Error in 2019 ARERR | 07/13/2020 |
| | | AR 04412896 | Unit 3 Area Radiation Monitor Power Supply Issue | 03/31/2021 |
| | Corrective Action Documents Resulting from Inspection | AR 04344598 | Typographical Errors Identified in the 2019 ARERR | 05/20/2020 |
| | Miscellaneous | | 2020 Annual Radioactive Effluent Release Report (ARERR) | 04/2021 |
| | | | 2019 Annual Radioactive Effluent Release Report (ARERR) | 04/2020 |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date | |
|----------------------|-----------------------------|-----------------------------|---|---|------------|
| | | | Dresden 2019 Offsite Dose Calculation Manual (ODCM) | 16 | |
| | | | Dresden 2019 Offsite Dose Calculation Manual (ODCM) | 15 | |
| | | G-20210101-817-C | Gas Permit Post Release Data | 02/01/2021 | |
| | | G-20210201-824-C | Gas Permit Post-Release Data | 03/01/2021 | |
| | Procedures | CY-AA-130-201 | Radiochemistry Quality Control | 8 | |
| | | CY-AA-170-210 | Potentially Contaminated System Controls Program | 2 | |
| | Self-Assessments | AR 04384090 | Radioactive Gaseous & Liquid Effluent Treatment IP 71124.06 Self-Assessment | 03/11/2021 | |
| 71124.08 | Corrective Action Documents | AR 04339867 | NOS ID: Two Radwaste Shipments had Identical Shipping Numbers | 04/30/2020 | |
| | | AR 04340168 | NOS ID: ARMA 55 Shipping Records Not Sent to Records Management for 7 Months | 05/01/2020 | |
| | Operability Evaluations | FO-OP-023 | Bead Resin/Activated Carbon Dewatering Procedure for Duratek 14-215 or Smaller Liners | 22 | |
| | Procedures | RW-AA-100 | Process Control Program for Radioactive Wastes | 12 | |
| | Radiation Surveys | | 2020 10 CFR 61 Analysis for Dry Activated Waste | 04/29/2021 | |
| | | | 2019 10 CFR 61 Analysis for Condensate Resin | 01/12/2021 | |
| | Self-Assessments | AR 04378875-06-02 | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation Self-Assessment | 05/2021 | |
| | Shipping Records | DW-20-001 | Shipment DW-20-001 for an LSA-II Shipment of Condensate Resin Pre-Filters | 06/08/2020 | |
| | | DW-20-026 | Shipment DW-20-026 for an LSA-II Shipment of Unit 2/3 Dry Activated Waste (DAW) | 07/15/2020 | |
| | | DW-21-011 | Shipment DW-21-011 for an LSA-II Shipment of Bead Resin from the Spent Fuel Pool | 06/07/2021 | |
| | 71151 | Corrective Action Documents | 4393484 | Excessive In-Leakage onto 3C Circulating Water Pump MOV | 01/02/2021 |
| | | Procedures | DR-MSPI-01 | Reactor Oversight Process MSPI Basis Document | 14 |
| | 71152 | Corrective Action Documents | 04404340 | 3B LPCI HX Tube Side Inlet Pressure Reading 0# | 02/24/2021 |
| 2579419 | | | Found Moisture Inside Switch Body | 10/30/2015 | |
| 4007152 | | | Found Mineral Deposits Inside Barton Switch | 05/05/2017 | |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|----------------------|-----------------------------|---|---|------------------|
| | | 4133781 | DPIS 2-0261-35A Found Out of Tolerance | 05/02/2018 |
| | | 4193454 | 3B RR Pump DP Switch is Grounded | 11/09/2018 |
| | | 4244414 | Unexpected Alarm 903-4 C-22 due to 3-2301-14 Opening | 04/29/2019 |
| | | 4280928 | DPIS will not Trip | 09/20/2019 |
| | | 4290427 | Historical Operability Review for DPIS 3-0261-35C | 10/23/2019 |
| | | 4324368 | Operations Evaluate Disabling HPCI Pre-Action as OWA/OC | 03/06/2020 |
| | | 4335087 | Conduit Rusted for Cabling into 2202-19A Rack | 04/13/2020 |
| | | 4352983 | IEMA Walkdown TBCCW | 06/26/2020 |
| | | 4367045 | Found DPIS 2-0261-35C Out of Tolerance | 09/02/2020 |
| | | 4388991 | 3B LPCI Heat Exchanger Tube Side Pressure Reading 0# | 12/09/2020 |
| | | 4389830 | U3 LPCI Loop II CCSW Pump D Discharge Test Connection Valve Plugged | 12/13/2020 |
| | | 4395944 | Leak on 2A CRD Pump from Fire Header Leak | 01/14/2021 |
| | | 4400499 | Documenting Failure Analysis of 2A Recirculation Pump DPIS | 02/05/2021 |
| | | 4406791 | 3D CCSW Discharge Check Valve Inspection | 02/26/2021 |
| | | 4412599 | Degraded Piping off the 2-1401-4 Jockey Pump | 03/30/2021 |
| | | 4418395 | EOC Replace 2-0261-35A DPIS | 04/22/2021 |
| | | 4418398 | EOC Replace 2-0261-35G | 04/22/2021 |
| | | 4429936 | NRC Concerns: Scaffold Program | 06/17/2021 |
| | Miscellaneous | MMD2021 | Dresden Scaffold Control Log | 06/14/2021 |
| | Procedures | MA-AA-716-025 | Scaffold Installation, Modification, and Removal Request Process | 18 |
| MA-AA-796-024 | | Scaffold Installation, Inspection, and Removal | 12 | |
| PI-AA-125 | | Corrective Action Program (CAP) Procedure | 6 and 7 | |
| Work Orders | 4634412 | Unit 3 Open, Clean, and Inspect 3A LPCI Room Cooler Coils | 04/16/2021 | |
| 71153 | Corrective Action Documents | 4422420 | 2B Reactor Recirculation Pump Trip | 05/08/2021 |
| | | 4422466 | Unit 2 125V DC Ground | 05/09/2021 |
| | | 4422801 | Report of Wisping Smoke from Cable Tray in Unit 2 LPHB | 05/11/2021 |
| | | 4424306 | Unit 3 Generator Voltage Regulator Unresponsive | 05/18/2021 |
| Procedures | DAN 903-8, C-4 | 4 kV Bus 33-1 Voltage Degraded | 15 | |
| | DGA-07 | Unexpected Reactivity Change | 26 | |
| | DGP 03-01 | Power Changes | 140 | |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|----------------------|------|-------------|--|------------------|
| | | DGP 03-03 | Single Recirculation Loop Operation | 50 |
| | | DIP 0700-25 | APRM Setpoint Adjustments to Enter into Single Loop Operation | 17 |
| | | DIP 0700-26 | Single Recirculation Loop Operation Rod Block Monitor Calibration Test | 11 |
| | | DOA 0010-10 | Fire-Explosion | 26 |
| | | DOA 0202-01 | Recirculation Pump Trip | 47 |
| | | DOA 6500-08 | Unit 3 4 kV Emergency Bus Degraded Voltage | 12 |
| | | DOS 0202-04 | Operators Single Loop Operation Surveillance | 17 |