UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE RD. SUITE 210
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February 8, 2019

Mr. Bryan C. Hanson
Senior VP, Exelon Generation Company, LLC
President and CNO, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3—NRC INTEGRATED INSPECTION REPORT 05000237/2018004 AND 05000249/2018004

Dear Mr. Hanson:

On December 31, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Dresden Nuclear Power Station, Units 2 and 3. On January 7, 2019, 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.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

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

Docket Nos. 50–237; 50–249
License Nos. DPR–19; DPR–25

Enclosure:
IR 05000237/2018004; 05000249/2018004

cc: Distribution via ListServ®

Letter to Bryan Hanson from Kenneth Riemer dated February 8, 2019

SUBJECT: DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3—NRC INTEGRATED INSPECTION REPORT 05000237/2018004 AND 05000249/2018004

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REGION III

Docket Nos:	05000237; 05000249
License Nos:	DPR–19; DPR–25
Report No:	05000237/2018004; 05000249/2018004
Enterprise Identifier:	I–2018–004–0030
Licensee:	Exelon Generation Company, LLC
Facility:	Dresden Nuclear Power Station, Units 2 and 3
Location:	Morris, IL
Dates:	October 1 through December 30, 2018
Inspectors:	A. Nguyen, Senior Resident Inspector R. Elliott, Resident Inspector C. Phillips, Project Engineer J. Mancuso, Reactor Engineer G. Edwards, Health Physicist M. Garza, Emergency Preparedness Inspector T. Go, Senior Health Physicist M. Domke, Reactor Inspector
Approved by:	K. Riemer, Chief Branch 1 Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring licensee's performance by conducting an integrated quarterly inspection at Dreden 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.

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000237/2017-002-00	Primary Containment Inboard and Outboard Feedwater Isolation Valves Exceed Leakage Limits	71153	Closed
LER	05000237/2017-002-01	Primary Containment Inboard and Outboard Feedwater Isolation Valves Exceed Leakage Limits	71153	Closed

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PLANT STATUS

Unit 2 began the inspection period at rated thermal power. On November 30, 2018, the unit was down powered to 62 percent to perform control rod SCRAM time testing, a control rod sequence exchange, turbine testing, and repairs to the 2B feedwater regulating valve. The unit was returned to rated thermal power on December 3, 2018, and remained at or near rated thermal power for the remainder of the inspection period.

Unit 3 began the inspection period in coast down to prepare for refueling outage D3R25. The unit came offline on October 28, 2018, to commence D3R25. The refueling outage ended and the unit synchronized to the grid on November 12, 2018. On November 17, 2018, the unit was down powered to 60 percent for control rod pattern adjustments and returned to rated thermal power on November 18, 2018. On December 1, 2018, the unit was emergently down powered to 87 percent to perform maintenance on a turbine control valve and returned to rated thermal power that same day. On December 8, 2018, the unit was down powered for a control rod pattern adjustment and returned to rated thermal power on December 9, 2018. Finally, on December 20, 2018, the unit was emergently down powered to 20 percent to perform repairs to the electrohydraulic control (EHC) system. The unit returned to rated thermal power on December 22, 2018, and operated there 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 performed plant status activities described in IMC 2515 Appendix D, "Plant Status" and conducted routine reviews using IP 71152, "Problem Identification and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01—Adverse Weather Protection

Seasonal Extreme Weather (1 Sample)

The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of extreme cold temperatures and conditions that could adversely affect the ultimate heat sink such as ice blockages and frazil ice.

71111.04—Equipment Alignment

Partial Walkdown (3 Samples)

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

(1) Unit 3 shutdown cooling on October 29, 2018;
(2) Unit 3 fuel pool cooling on November 1, 2018; and
(3) Unit 3 electrical alternating current (AC) power on November 5, 2018.

71111.05AQ—Fire Protection Annual/Quarterly

Quarterly Inspection (6 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas:

(1) Fire Zone (FZ) 1.1.1.5D, Unit 3 standby liquid control area, Elevation 589' on October 4, 2018;
(2) FZ 8.2.5D, Unit 3 low pressure heater bay, Elevation 517' on October 30 and 31, 2018;
(3) FZ 1.1.1.1, Unit 3 torus basement, Elevation 476' on November 3, 2018;
(4) FZ 1.2.1, Unit 3 drywell primary containment, Elevation 517' on November 5, 2018;
(5) FZ 8.2.5E, Unit 3 high pressure heater bay, Elevation 517' on October 31, 2018; and
(6) FZ 1.1.1.3, Unit 3 reactor water clean up pump room, Elevation 545' on November 1, 2018.

71111.08—In-Service Inspection Activities (1 Sample)

The inspectors assessed the effectiveness of the licensee's programs for monitoring degradation of the reactor coolant system boundary, risk-significant piping system boundaries, and the containment boundary by reviewing the following activities from October 29, 2018, to November 2, 2018:

(1) Ultrasonic, volumetric examination (UT–1) of low pressure cooling injection (LPCI), class 2 component 3/2/HTEX 3A–1503/3–1503A–1, tubesheet-to-shell weld, thickness 0.875 in. and diameter 62.75 in., ASME Section XI category C–A, located in the east LPCI corner room;
(2) Ultrasonic, volumetric examination (UT–1) of isolation condenser (IC), risk-informed component ISO–06F, elbow-to-elbow weld, nominal thickness 0.720 in. and diameter 12 in., ASME Section XI category R–A, located second floor of the drywell;
(3) Ultrasonic, volumetric examination (UT–1) of IC, class 2 component 3/2/1302A–12/12–8, nozzle-to-shell weld, thickness 1.188 in. and diameter 12 in., ASME Section XI category C–B, located in the reactor building isolation condenser floor elevation 589 ft.;
(4) Ultrasonic, volumetric examination (UT–3) for through-wall sizing of two detected flaw indications in the preceding isolation condenser nozzle-to-shell weld;
(5) Magnetic particle, surface examinations, class 2 components 3/2/1302A–12/12–8 and 3/2/1302B–12/12–9, nozzle-to-shell welds as described for the preceding nozzle-to-shell isolation condenser welds; and
(6) Pressure boundary class 2 welds for replacements associated with crystalized boron found on Unit 3 standby liquid control discharge piping, work order 04683812.

71111.11—Licensed Operator Requalification Program and Licensed Operator Performance

Operator Requalification (1 Sample)

The inspectors observed and evaluated an out-of-the-box evaluation scenario on October 15, 2018.

Operator Performance (2 Samples)

The inspectors observed and evaluated the Unit 3 shutdown and startup for refueling outage D3R25 on October 28-29, 2018, and November 11 – 13, 2018, respectively.

The inspectors also observed and evaluated the Unit 3 down power and subsequent power ascension to affect repairs on the EHC system on December 20 and 21, 2018.

71111.12—Maintenance Effectiveness

Routine Maintenance Effectiveness (1 Sample)

The inspectors reviewed the licensee's Periodic Evaluation of the Maintenance Rule Program as required by 10 CFR 50.65(a)(3). The review covered the 2 year time frame from 2016 to 2018 for Unit 3.

Quality Control (1 Sample)

The inspectors evaluated maintenance and quality control activities associated with the following equipment performance issues:

(1) Unit 3 oscillating power range monitor (OPRM) #6 module failures.

71111.13—Maintenance Risk Assessments and Emergent Work Control (4 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

(1) Emergent troubleshooting on the Unit 3 rod worth minimizer;
(2) Outage risk Yellow for lowered inventory condition on Unit 3;
(3) Outage risk Yellow for lowered inventory condition and decay heat removal function on Unit 3; and
(4) Unplanned risk change to Yellow and subsequent electrical transient on Unit 2 due to the 345kV Line 2311 8–15 breaker faulting.

71111.15—Operability Determinations and Functionality Assessments (3 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

(1) Unexpected downscale alarm on Unit 2 fuel pool channel B during reactor building ventilation area radiation monitor channel functional test;

(2) Various control rod drive issues identified during refueling outage testing and power ascension; and
(3) Unit 3 main steam line D high flow isolation pressure switch exceeded technical specification allowable value.

71111.18—Plant Modifications (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

(1) Permanent modification to the Unit 3 shutdown cooling system logic

71111.19—Post Maintenance Testing (5 Samples)

The inspectors evaluated the following post maintenance tests:

(1) Test run and surveillance of the Unit 3 emergency diesel generator (EDG) following governor replacement;
(2) Stroking of the Unit 3 LPCI loop Division I drywell spray inboard isolation valve following motor replacement;
(3) Operation of the 3B reactor recirculation pump following seal replacement and maintenance during D3R25;
(4) Surveillance testing of the Unit 3 source range monitor (SRM) 23 following repairs; and
(5) Local leak rate testing (LLRT) and surveillance testing of the Unit 3 main steam isolation valves (MSIVs) following repairs in D3R25 after failing their respective as-found LLRTs.

71111.20—Refueling and Other Outage Activities (1 Sample)

The inspectors evaluated refueling outage D3R25 activities from October 28, 2018 to November 13, 2018.

71111.22—Surveillance Testing

The inspectors evaluated the following surveillance tests:

Routine (2 Samples)

(1) DIS 0263–13, Unit 3 Anticipated Transient Without Scram (ATWS) RPT/ARI Logic System Functional Test on October 30 – November 4, 2018; and
(2) DIS 1400–05, Unit 2 Division II Core Spray System Logic System Functional Test, October 16, 2018.

In-Service (1 Sample)

(1) Unit 3 Division 2 undervoltage test on November 3 – 4, 2018.

Containment Isolation Valve (2 Samples)

(1) Main steam isolation valve LLRT from October 29 through November 5, 2018; and
(2) Reactor water cleanup valves LLRTs from October 31 through November 4, 2018.

71114.04—Emergency Action Level and Emergency Plan Changes (1 Sample)

The inspectors completed the evaluation of submitted Emergency Action Level and Emergency Plan changes on October 19, 2018. This evaluation does not constitute NRC approval.

RADIATION SAFETY

71124.01—Radiological Hazard Assessment and Exposure Controls

Radiological Hazard Assessment (1 Sample)

The inspectors evaluated radiological hazards assessments and controls.

Instructions to Workers (1 Sample)

The inspectors evaluated worker instructions.

Contamination and Radioactive Material Control (1 Sample)

The inspectors evaluated contamination and radioactive material controls.

Radiological Hazards Control and Work Coverage (1 Sample)

The inspectors evaluated radiological hazards control and work coverage.

High Radiation Area and Very High Radiation Area Controls (1 Sample)

The inspectors evaluated risk-significant high radiation area and very high radiation area controls.

Radiation Worker Performance and Radiation Protection Technician Proficiency (1 Sample)

The inspectors evaluated radiation worker performance and radiation protection technician proficiency.

71124.02—Occupational As Low As Reasonably Achievable Planning and Controls

Radiological Work Planning (1 Sample)

The inspectors evaluated the licensee's radiological work planning by reviewing the following activities:

(1) RWP DR–03–18–00509; D3R25 Drywell MSIV Activities;
(2) RWP DR–03–18–00906; D3R25 Refuel Floor Facility Cavity Decontamination;
(3) RWP DR–03–18–00901; D3R25 Reactor Disassembly Reassembly Activities; and
(4) RWP DR–03–18–00510; D3R25 Drywell ERV, SRV, and Target Rock.

Radiation Worker Performance (1 Sample)

The inspectors evaluated radiation worker and radiation protection technician performance.

71124.05—Radiation Monitoring Instrumentation

Walk Downs and Observations (1 Sample)

The inspectors evaluated radiation monitoring instrumentation during plant walkdowns.

OTHER ACTIVITIES – BASELINE

71151—Performance Indicator Verification (6 Samples)

The inspectors verified licensee performance indicators submittals listed below:

(1) MS05: Safety System Functional Failures (SSFFs) Samples–2 Samples (October 1, 2017 – September 30, 2018);
(2) BI02: RCS Leak Rate Samples–2 Samples (October 1, 2017 – September 30, 2018);
(3) OR01: Occupational Exposure Control Effectiveness; 1 Sample, (December 2017 – October 2018); and
(4) PR01: RETS/ODCM Radiological Effluent Occurrences; 1 Sample, (September 2017 – September 2018).

71152—Problem Identification and Resolution

Semiannual Trend Review (1 Sample)

The inspectors reviewed the licensee's corrective action program for trends that might be indicative of a more significant safety issue.

Annual Follow-Up of Selected Issues (1 Sample)

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

(1) Unit 2 and Unit 3 Feedwater Level Control issues.

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

Licensee Event Reports (2 Samples)

The inspectors evaluated the following licensee event reports which can be accessed at https://lersearch.inl.gov/LERSearchCriteria.aspx:

(Closed) Licensee Event Report 05000237/2017–002–00 and 05000237/2017–002–01: Primary Containment Inboard and Outboard Feed Water Isolation Valves Exceed Leakage Limits

On November 1, 2017, while Unit 2 was shut down for refueling outage D2R25, the in series feed water "A" loop containment isolation valves failed their LLRT acceptance criteria. The "as found" leak rate for both valves was indeterminate, therefore the licensee assumed the limits for primary containment leakage exceed the Administrative Controls section of Technical Specifications (TS). The licensee determined that the cause of this event was

that corrective actions to “improve maintenance and testing practices had not yet been implemented for the A loop.”

The inspectors reviewed the licensee’s actions and immediate corrective actions in response to the event and determined there was no performance deficiency. Specifically, the licensee previously implemented changes to improve maintenance and testing practices for the “B” loop in the D2R24 refueling outage and had plans in its CAP to make the same changes to the “A” loop during the D2R25 refueling outage. The historical LLRT from the previous two outages for the “A” loop containment isolation valves did not exceed the limits specified in the Administrative Controls section of the TS, therefore the inspectors determined the corrective actions to be sufficient. The inspectors concluded the licensee had previous corrective actions in place for all susceptible valves and the implementation of those corrective actions was timely. Documents reviewed are listed in the attachment to this report. No findings or violations of NRC requirements were identified.

These LERs are closed.

INSPECTION RESULTS

No findings or violations were identified.

71152—Problem Identification and Resolution

Observation	71152 – Semi Annual Trend Review
The inspectors identified a potential trend in the area of Human Performance (HU) that might indicate the existence of a more significant safety issue. The inspectors reviewed condition reports and Human Performance Review Board (HURB) assessments for plant events and issues from July 2018 through December 2018. The inspectors specifically focused on the licensee’s timely evaluation of the issues, identification of root and contributing causes, and implementation of corrective actions to address those causes. The inspectors also specifically observed the station’s response to the trend in the increased number of HU events during and after the Unit 3 refueling outage, D3R25. The inspectors discussed the following HU issues with licensee staff. While performing the Unit 3 startup checklist in preparation for power ascension following D3R25, the operators opened the feedwater (FW) stop valves, as directed by their procedure, and an unexpected ~20” rise in reactor water level occurred. This was directly following a trip of the reactor water clean up (RWCU) auxiliary pump which caused an unexpected ~10” reactor water level rise. The cause of the higher than anticipated change in reactor water level was believed to be due to a large time delay in the filling and venting of the FW system and execution of the final startup checklist leading to a larger than anticipated pressure buildup in the system. Also, the FW valves were believed to have experienced significant leak by. The licensee conducted a HURB which noted that Operators were not prepared for this large change in level; the procedure for filling and venting the FW system noted that some oscillations in level could occur but the startup checklist does not say this. Also contributing to the HU aspects of this issue was that on day shift a level transient occurred (~20”) while performing the fill and vent activity which was not documented in the logs or turned over to the night shift crew. The inspectors reviewed all supporting documentation for this event and determined that a performance deficiency did not exist.	

Also in the area of HU within the Operations department were issues during the refueling outage related to a missed post maintenance test (PMT) on the condensate system because of improper system configuration control and lack of coordination when performing multiple work orders, a misunderstanding of the operation of the Unit 3 emergency diesel generator (EDG) shutdown logic when using the local pushbutton which led to field operators manually shutting down the EDG with the fuel rack lever when it was not necessary, and a contaminated water spill from the isolation condenser system during the reactor vessel hydro test because a temporary fill rig was left installed and the system in an abnormal alignment when it was not intended to be at the pressure used during the hydro test. These are just some examples that the inspectors discussed with the licensee related to operator technical fundamentals, knowledge, configuration control, and work control coordination that were identified as areas for improvement after evaluating these events. The previous examples were determined by the inspectors to be of minor safety significance; however, the inspectors felt the underlying HU aspects of the issues needed to be addressed to prevent similar or more significant issues from occurring.

The inspectors also identified that the HU issues reached other departments and that the causes of these issues were similar to the operations issues discussed above. Specifically, improvements were identified to be needed in the areas of technical HU, knowledge, and ensuring the proper procedure adherence and task rigor were used. Some HU issues in the area of maintenance included overfilling the 3B reactor recirculation pump lower motor oil reservoir causing the pump seal to be replaced during D3R25, and attempting to install the wrong size bolts when replacing one of the RWCU heat exchanger relief valves. The latter issue was significant because the rework caused the operating unit to enter an unplanned short term (4 hour) TS limiting condition for operations (LCO) for secondary containment, and increased the shutdown unit time in Yellow risk. Finally, HU issues were identified in the engineering area when it was discovered that the engineering change process was not followed when cyber security reviews were not completed for modifications on the intermediate range monitor/source range monitor (IRM/SRM) recorders and the plant data acquisition system. Also, multiple revisions, extensive troubleshooting, and changes to testing criteria were required for a modification to the Unit 2 ‘A’ instrument air compressor system due to a lack of knowledge of the system, unexpected responses from unknown interfaces with control room equipment, and lack of coordination with the system vendor. The insepctors reviewed each of the above issues for potential safety significance and determined they were minor.

The licensee promptly evaluated each of these issues and took specific corrective actions for each individual event to address the direct causes and circumstances for those events. The inspectors reviewed this information and conducted interviews with site personnel and determined that the causes identified and actions taken seemed appropriate for each specific case. The inspectors also discussed with station management and the corrective action program personnel station-wide actions to address the larger issues. The licensee planned to implement in the first quarter 2019, special Management Review Meetings once a week to go over actions to improve HU in each department. These meetings were planned to be a continuing dialog among station leadership on the actions taken in each department and the effectiveness of those actions. The residents planned to continue to follow the licensee’s activities in this area.

Observation	71152 –Annual Sample Review
The inspectors selected the feedwater regulating valve (FRV) issues to review in-depth to ensure corrective actions taken were commensurate with the safety significance of the	

identified conditions, that compensatory measures were appropriate and operators were properly prepared to work around the degraded equipment conditions, and that the issues were thoroughly evaluated and corrected based on equipment failure analyses and historical operating experience data from the site.

On August 30, 2018, and September 8, 2018, various feedwater level control (FWLC) alarms were received on Unit 3. The 3B FRV was operating erratically, swinging open and closed in a larger band than normal. Operators promptly placed the valve into manual operation and were able to maintain it in that condition with no abnormal movement until it was repaired during D3R25 in November 2018. The Licensee determined that an O-ring where the stem enters the actuator was leaking, which caused the valve to overshoot and low pressure alarms to be received in the control room. The inspectors reviewed the preventive maintenance (PM) strategy for these components and an extent of condition performed for the other 3 FRVs. The licensee determined that the preventative maintenance strategy was appropriate and degradation would be captured with the existing testing and maintenance program. The inspectors reviewed this information and determined that the cause evaluation and actions taken to address the issue were timely and thorough. The inspectors interviewed operators and determined that the compensatory measures provided and the operator work arounds were reasonable and within the operators training and knowledge to execute effectively. The site had extensive operating experience related to issues with the FRVs which helped inform their troubleshooting efforts and corrective actions plans.

On October 21, 2018, the Unit 2 'B' FRV began to operate erratically, again swinging open and closed in a larger band than normal. This valve was also taken to the manual mode of operation and remained there until it was repaired during a unit downpower in December 2018. Similar operator work around conditions and compensatory measures were in place on Unit 2 and Unit 3 for degraded FRVs for a short period of time until the refueling outage began on October 28, 2018 on Unit 3. The inspectors reviewed the cumulative impacts of these conditions and the timeliness of the corrective actions taken for both issues and did not identify any concerns. Similar evaluation of the equipment failure and historical operating experience were reviewed for the 2B FRV issue after its repair in December. The cause of this failure was determined to be a failure of the Jucomatic part of the FRV. Appropriate actions were taken to review maintenance history and PM activities for extent of condition reviews to ensure further issues with the FRVs were prevented if possible and were identified and corrected and timely manner.

EXIT MEETINGS AND DEBRIEFS

The inspectors confirmed that proprietary information was controlled to protect from public disclosure. No proprietary information was documented in this report.

- On January 7, 2019, the inspectors presented the quarterly integrated inspection results to Mr. P. Karaba and other members of the licensee staff.
- On November 9, 2018, the inspector presented the radiation protection program inspection results to Mr. P. Hansett, Operations Director, Acting Plant Manager, and other members of the licensee staff.
- On November 2, 2018, the inspector presented the inservice inspection activities results to Mr. P. Hansett, and other members of the licensee staff.

- On October 25, 2018, the inspector presented the emergency preparedness inspection results to Mr. P. Karaba, and other members of the licensee staff.

THIRD PARTY REVIEWS

Inspectors reviewed Institute of Nuclear Power Reactor reports that were issued during the inspection period.

DOCUMENTS REVIEWED

71111.01—Adverse Weather Protection

- WO 04724937, Preparation for Cold Weather Unit 1
- WO 04724900, Preparation for Cold Weather Changes for Radwaste
- WO 04720907, Preparation for Cold Weather for Lift Station
- WO 04724806, Preparation for Cold Weather for Unit 2
- WO 04720895, Preparation for Cold Weather for Unit 3
- IR 4182699, DOA 5700–01 Entry Due to Low Outside Air Temperature
- IR 4183648, DOA 5700–01 Entry Due to Low Outside Air Temperature
- IR 4185789, DOA Entry Due to High Winds
- IR 4187505, SBO Building Area Heater Fan Not Functioning
- IR 4187507, SBO Building Area Heater Not Functioning
- IR 4187510, Electric Unit Heater Does Not Work
- IR 4195307, RUPS Area Heater 2/3–57530–G
- IR 4196418, CST Piping Heat Trace on the 2/3-1501-37 Valve Not Operating
- IR 4197708, East TB Ventilation Performance Challenging U2 TS Battery Temperatures
- DOP 4400–07, Circulating Water De-Icing Operation, Revision 15
- DOA 4400–06, 2/3 Crib House Screen Plugging, Revision 08
- DOA 5700–01, Loss of Heating Boilers, Revision 24
- FSG–40, Flex Deployment Path and Debris Removal, Revision 01
- OP–AA–102–102, General Area Checks and Operator Field Rounds, Revision 15
- SA–AA–2114, Winter Safety, Revision 3
- SA–AA–2130, BRE Tower Safety and Emergency Extraction, Revision 17
- SY–DR–101–146, Severe Weather Preparation and Response, Revision 0

71111.04—Equipment Alignment

- IR 4189003, U3 Shutdown Cooling Questions
- IR 4189142, Unexpected Alarm 903-4 A-21 SDC Permissive Trip Unit Failure
- IR 4191233, 3–1999–320 Valve Leakage
- IR 4191234, 3–1999–322 Valve Leakage
- IR 4191973, NRC ID: Protected Pathway Issue and Relay Flags
- DOP 1000–M1/E1, Unit 3 Shutdown Cooling Checklist, Revision 14
- DOP 1000–03, Shutdown Cooling Mode of Operation, Revision 82
- Drawing: M–363, Diagram of Shutdown Reactor Cooling Piping, Revision BF
- DOP 1900–M1, Unit 3 Fuel Pool Cooling System Checklist, Revision 13
- DOP 1900–E1, Fuel Pool Cooling Electrical, Revision 01
- DOP 1000–04, Fuel pool Cooling Mode of Operation of Shutdown System, Revision 36
- DOS 10000–02, Alternate Decay Heat Removal Using Shutdown Cooling and Fuel Pool Cooling, Revision 20

- DOS 0040–11, Unit 3 Shutdown Power Sources and Distribution, Revision 17
- DOP 1000–07, Alternate Shutdown Cooling, Revision 01
- DOP 6500–08, Bus 24–1 to Bus 34–1 Tie Breaker Operation, Revision 24
- DOP 6500–30, Bus 23–1 to Bus 33–1 Tie Breaker Operation, Revision 16

71111.05AQ—Fire Protection Annual/Quarterly

- Dresden Generating Station Pre-Fire Plan for Each Zone
- IR 4189220, U3 Low Pressure Heater Bay Fire Watch Cameras Not Working
- OP-AA–201-009, Control of Transient Combustible Material, Revision 20
- IR 4190401, Inadequate Spark Containment CCSW Pipe Replacement
- IR 4190718, Inadequate Spark Containment – Molten Slag
- IR 4193217, Degraded Fire Protection Support in Torus Basement
- IR 4189726, D3R25: Corroded FP Pipe in High Pressure Heater Bay
- IR 4192367, Fire Protection Header Leak
- IR 4190736, NRC ID: Housekeeping Issues in U3 RWCU Pump Room
- IR 4191128, Calibrate Cardox Tank Level Indicator 2/3–7641–2B

71111.08—In-Service Inspection Activities

- D3R20-009; Examination Summary Sheet; 11/08/2008
- D3R25-UT-002; UT Calibration/Examination; 10/31/2018
- D3R25-UT-005; UT Calibration/Examination; 10/30/2018
- D3R25-UT-006; UT Calibration/Examination; 10/30/2018
- D3R25-UT-007; UT Calibration/Examination; 10/31/2018
- D3R25-UT-008; UT Calibration/Examination; 10/31/2018
- D3R25-MT-002; Magnetic Particle Examination; 10/30/2018
- D3R25-MT-003; Magnetic Particle Examination; 10/30/2018
- WO 04683812 01; MM Replace Tee on U3 SBLC Discharge Piping
- WO 01882850 01; *D3 3B LPCI/Containment Cooling HT
- EC 621219; Evaluate the Addition of a Coupling on Standby Liquid Control Discharge
- IR 4051222; Unit 3 Standby Liquid Control System Leak
- IR 3987156; Through Wall Pipe Leak on CCSW Line 3-1514-16”
- IR 3994071; Lessons Learned from U3 CCSW Leak Repair
- IR 2740811; Leakage Identification During D3R24 Class 1 Leakage Test
- ER-AA-335-010; Guidelines for ASME Code Allowable Flaw Evaluation and ASME Code Coverage Calculations; Revision 7
- ER-AA-335-003; Magnetic Particle (MT) Examination; Revision 8
- WPS 8-8-GTSM; Welding Procedure Specification; Revision 6
- GEH-PDI-UT-1; PDI Generic Procedure for the Ultrasonic Examination of Ferritic Pipe Welds; Revision 12
- GEH-PDI-UT-2; PDI Generic Procedure for the Ultrasonic Examination of Austenitic Pipe Welds; Revision 12
- GEH-PDI-UT-3; PDI Generic Procedure for Ultrasonic Through Wall Sizing in Piping Welds; Revision 6

71111.11—Licensed Operator Requalification Program and Licensed Operator Performance

- DGP 01–01, Unit Start Up, Revision 195
- DGP 01–81, Start-Up Checklist, Revision 101
- DGP 02–01, Unit Shutdown, Revision 164

- DOP 0500–06, Planned Movement of the Reactor Mode Switch, Revision 18

71111.12—Maintenance Effectiveness

- IR 4041057, OPRM 6 Failed Response Time Test
- IR 4112084, OPRM 6 Power Supply Failure
- IR 4158241, OPRM 6 Fails Processor Interface Test
- WO 04810767, OPRM 6 Fails Processor Interface Test
- WO 04673413, OPRM 6 Failed Response Time Test
- Quality Receipt Inspection Package #198128
- Quality Receipt Inspection Package #156572
- Purchase Order Revision for #00483188, Revision 04
- Maintenance Rule Periodic Assessment #12 for the Assessment Period of 10/1/2016–9/30/2018

71111.13—Maintenance Risk Assessments and Emergent Work Control

- OP-AA-108-117, Protected Equipment Program, Revision 5
- Protected Equipment Lists for Unit 2 and Unit 3 Risk Significant Systems
- IR 4177897, U3 RWM Screen Indicates “??” for all CRDs
- WO 04835914, U3 RWM Screen Indicates “??” for All CRDs
- IR 4193300, Unexpected Alarm 903-4 A–11 RWCU Auxiliary Pump Trip
- EC 623692, Temporary Power to MCC 39–3 Utilizing Switchgear 39–4A
- DOS 1000–02, Alternate Decay Heat Removal Using Shutdown Cooling and Fuel Pool Cooling, Revision 20
- DOP 1000–04, Fuel Pool Cooling Mode of Operation of Shutdown Cooling System, Revision 36
- DOP 0201–04, Reactor Pressure Vessel Water Inventory Control, Revision 14
- OU–DR–104, Shutdown Safety Management Program, Revision 22
- DOP 1900–03, Reactive Cavity, Dryer/Separator Storage Pit and Fuel Pool Level Control, Revision 56
- OP–AA–108–117, Protected Equipment Program, Revision 5
- OP–DR–104–1001, Shutdown Risk Management Contingency Plans, Revision 09
- DOP 6500–08, Bus 24–1 to Bus 34–1 Tie Breaker Operation, Revision 24
- DOP 6500–30, Bus 23–1 to Bus 33–1 Tie Breaker Operation, Revision 16
- IR 4204534, Grid Disturbance Due to Switching
- IR 4204495, Security Momentary Loss of Power
- DGA–07, Unexpected Reactivity Change, Revision 26
- DOA 6100–04, Dresden Station Switchyard Trouble, Revision 03
- DOP 6000–08, Automatic Voltage Regulator Local Alarm Response, Revision 02
- DOP 5650–15, Alarm Response for DAN 902(3)–7 B–5, Minor Trouble Turb Control, Revision 15
- DAN 902(3)–4 B–5, 2B Recirc Drive Minor Trouble, Revision 10
- DAN 923–2 E–2, CB 8–15 trip, Revision 09
- DAN 923–2 C–2, TR81, TR83, TR86 Major Trouble Alarms, Revision 21
- DAN 902(3)–4 C–5, 2B Recirculation Drive Speed Hold, Revision 15
- DAN 902(3)–7 B–5, Turbine Control Minor Trouble, Revision 13
- DAN 903–8 F–6, U3 Generator Voltage Regulator Common Alarm, Revision 06

71111.15—Operability Determinations and Functionality Assessments

- IR 4183920, Unexpected Downscale on Fuel Pool Channel 'B'
- DAN 902(3)–3 F–16, Reacotr Building Fuel Pool Channel 'B' Downscale, Revision 10
- Drawing: 12E–2488, Schematic Diagram, Control Room Annunciator Panel 902(3)–3, Revision BH
- Drawing: 12E–2575AK, Schematic Diagram, Process Radiation on Monitoring System, Revision H
- IR 4183697, CRD P–4 Failed Insert Stall Flow Test Per DOP 0300–26
- IR 4189167, CRD 14–55 (D14) Very Slow Insertion During Shutdown
- IR 4191615, CRD G-12 Will Not Withdraw
- IR 4191713, CRD 26–47 (G–12) Issues Following CDRM Replacement
- IR 4193806, U3 CRD J–6 Withdraw and 120 Valve Closed
- IR 4193904, U3 CRD H–14 Requires Elevated Drive Water Pressure
- IR 4194296, Scram Time for CRD N–05 Above Early Warning Time
- IR 4194592, CRD Slightly Fast During Withdrawal
- IR 4194918, CRD K–9 (38-35) High Temperature at 350F
- IR 4195032, CRD HU 38-39 K-10 Rod Drive Temp Hi Alarm
- OP–DR–300–101, Average Scram Time Determination, Revision 2
- DOS 0300–04, Control Rod Drive Timing, Revision 61
- DOS 0300–06, Control Rod Drive Abnormality Record, Revision 28
- WO 01885472, Repair/Replace MSL High Flow DPIS per DIP 0250–01
- IR 4205332, Historical Operability for 3–0261–2N
- IR 4194830, Found DPIS Out of Tolerance – TS Violation
- IR 4194633, MSL Hi Flow DPIC 3–0261-2N Indication Low
- IR 4190863, MSL Hi Flow 3–0261–2N Not Zeroed Out

71111.18—Plant Modifications

- WO 01811125, Modify U3 SDC Reset Logic to Eliminate Relay Failure Single Point Vulnerability
- WO 04850055, 3–0595–110A Needs Replaced
- WO 04570366, PCIS Group III Isolation Logic System Functional Test
- EC 395523 (398744), Modify U2(3) SDC Reset Logic to Eliminate Relay Failure SPV
- EC 626284, MR90: Provide Temporary 120V AC to Relays 3–595–134 and 3–0595–135 in Panel 903–4 to Support Replacement of Relay 3–0595–110A
- IR 4167544, IR 02591995 Clarification for the Shutdown Cooling Modification
- IR 4191647, 3–595–110A Needs Replaced
- IR 4192874, C188 Not Indicating Correct during DIS 0500–18
- DIS 0500–18, Primary Containment Isolation System Group III (Reactor Water Cleanup System and Shutdown Cooling System) Logic System Functional Test, Revision 20

71111.19—Post Maintenance Testing

- DOS 6600–04, Bus Undervoltage (UV) and ECCS Integrated Functional Test for Unit 3 Diesel Generator, Revision 53
- IR 3964266, NRC Question Concerning TS SR 3.8.1.10 and 3.8.1.11
- IR 4186186, U3 UV Procedure DOS 6600–04 Correction
- IR 4190880, U3 EDG Shutdown Using Fuel Rack Lever
- IR 4192401, U3 EDG Generator EMI Test Results
- IR 4192407, EMI Test Results for U3 EDG Non-Segregated Bus

- WO 01827258, U3 EDG Governor Leak Troubleshoot/Repair/Replace
- DES 6600–01, Diesel Geneartor Governor Oil Change and Compensation Adjustment, Revision 34
- WO 04846694, MOV 3–1501–28A Clicking During Valve Stroke
- IR 4189780, Replace MOV 3–1501–28A Motor
- IR 4191939, Operations Department Identified “Clicking” Noise During PMT
- EC 626227, Breaker Setting Change to Support Motor Replacement for 3–1501–28A (3–7838–1H4), Revision 00
- WO 01608420, Inspect/Replace 3B Reactor Recirculation Pump Mechanical Seal
- DMP 0202–01, Recirculation Pump Seal Replacement and Pump Leak Test, Revision 35
- IR 4192887, WO 04634478–03 SRM 23 Acceptance Test Results
- WO 04634478, U3 SRM 23 Requires Undervessel Repair
- DOS 0700–01, SRM Functional Test, Revisions 24 and 25
- DOS 0700–03, SRM Detector Position Rod Block Functional Test, Revision 21
- DOS 0700–12, Determining Source Range Monitor Signal to Noise (S/N) Ratio and Minimum SRM Count Rate, Revision 02
- 50.59 Review for DOS 0700–01, SRM Functional Test, Revision 25
- IR 4191400, 3–0203–1A Actuator Failed Testing
- IR 4191478, 3–0203–1A Bore Out of Spec
- WO 1964822, TS LLRT MSIV 203–1A & 203–2A Dry Test
- DOS 7000–01, Local Leak Rate Testing (LLRT) of Main Steam Isolation Valves (Dry Tests), Revision 09
- WO 1964817, TS LLRT MSIV 203–1B & 203–2B Dry Test
- WO 1964818, TS LLRT MSIV 203–1C & 203–2C Dry Test
- WO 1965275, LLRT MSIV 203–2A Wet Test
- DOS 7000–02, Local Leak Rate Testing of Main Steam Isolation Valves (Wet Test), Revision 05

71111.20—Refueling and Other Outage Activities

- IR 4166007, New Fuel Assembly XEB354 Burrs Identified
- IR 4167621, New Fuel Shipment #3 Box Tripped Accelerometers
- IR 4167976, Piece of Wood Found in Fuel Assembly
- IR 4170899, New Fuel Bundle XEB393 Identified with Bent Seal Spring
- IR 4172368, New Fuel – Water Droplets and Musty Odor Inside Box IB0145
- IR 4174160, New Fuel Shipment #6 Tripped Fuel Container Accelerometers
- IR 4174603, Light Powdery Substance Identified on New Fuel Bundles
- IR 4177651, TR 3–0263–104, Reactor Vessel Metal Temperature Recorder Not Indicating
- IR 4182562, New Fuel Receipt Roll Up
- IR 4186934, Light Cover From U3 Refuel Bridge Fell off Into U3 SFP
- IR 4188752, Reactor Mode Switch 2–2C Contacts Not Closed in Start-Up
- IR 4188771, 3B RFP Discharge Valve Did Not Go Full Open
- IR 4188832, 3–1001–1A Breaker Tripped
- IR 4188840, 5 New Control Rod Drives Did Not Pass Inspection
- IR 4188960, HPCI Valve As-Found LLRT Exceed Administrative Limit
- IR 4189530, U3 Gen Alterrex Collector Ring Surface Display Imperfections
- IR 4189568, Electromatic Relief Line Vacuum Relief Valves
- IR 4189796, Sheared Piping for Service Water to Unit 3 ECCS Room Coolers
- IR 4189953, High Ripple Found on Power Supply
- IR 4190026, U3 LPCI CCSW Pump Discharge Check Valve Degraded
- IR 4190124, TRM Snubber 3–3019E–59 Failed Operational Test D3R25

- IR 4190154, Create WO to Test Snubber 3–3019A–57 Expanded Scope
- IR 4190163, Create WO to Test Snubber 3–3019B–61 Expanded Scope
- IR 4190166, 3–1105–B 3B SBLC Pmp Relief Valve Did Not Lift at Set Point
- IR 4190174, Failed Leak Rate on RWCU 3–1201–1 & 3–1201–1A Test
- IR 4190235, MOV 3–1402–25B Binding Identified
- IR 4190364, LLRT on 3–2001–6 Valve Exceeds Alarm Limit
- IR 4190719, FME: Paint Chips Discovered on U3 Dryer
- IR 4190869, Fatigue Assessment
- IR 4190877, MOV 3–1501–19B LLRT Exceeds Warning Limit
- IR 4191062, FME: Debris Discovered on Top of FW Sparger
- IR 4191093, FME: As-Found FME Inspection of Torus Vent Tubes & Centipede
- IR 4191214, 3–1201–126 Will Not Close
- IR 4191218, Could Not Verify CRDM Uncoupled
- IR 4191310, Fatigue Assessment
- IR 4191325, FME Found During Shroud Inspection
- IR 4191342, FME Discovered in Unit 3 Reactor Cavity During GEH Inspection
- IR 4191433, 3–1601–60 Failed Pressure Decay Test in DOS 1600–28
- IR 4191605, FME: Material Found on ‘B’ Main Condenser Hood False Bottom
- IR 4191675, FME: Foreign Material Found Upstream Side of the 3–0642–B
- IR 4191677, IRM 14 Drawer Lost Power
- IR 4191687, Electricians Found FME in Motor Winding Coil
- IR 4191820, FME: U3 RPV Steam Dryer
- IR 4192025, Fatigue Assessment
- IR 4192369, Degraded Drywell Head Areas Identified During Inspection
- IR 4192372, FME: ECCS Suction Strainer Inspection Results
- IR 4192544, Work Hour Waiver – Fatigue Assessment
- IR 4192666, Work Hour Rule Administrative Deviation
- IR 4192859, 3–1201–8 MOV Failed to Close
- IR 4192868, Peripheral Bundle Required Reseating
- IR 4193096, 3B LPCI Heat Exchanger Coating Inspection
- IR 4193435, U3 Drywell Wide Range Pressure Indicator is Downscale
- IR 4193480, 3–0220–47 Did Not Reposition as Required
- IR 4193484, 3–0220–45 Valve Not Showing Proper Indication
- IR 4193494, Unit 3 Group V (Isolation Condenser) Isolation Signal
- IR 4193637, Torus Level Indicator Deviation
- IR 4193646, D3R25 Class 1 and 2 System Leak Test Results
- IR 4193706, FME Dropped Into 3C CW Bay
- IR 4193707, U3 SFP Outer Gate Seal Leak
- IR 4193813, IRM 14 Failed Upscale
- IR 4193845, D3R25 Lessons Learned
- IR 4193950, Portions of Turbine Valve Testing Not Completed
- IR 4193961, PAM Instrumentation Report Required Per TS 5.6.6
- IR 4194402, D3R25LL: Maintenance HU Rapid Trending for D3R25
- IR 4194960, Drywell Closeout Results
- IR 4195568, D3R25LL: IMD Performance
- IR 4195695, D3R25: HU/THU Observation Roll-Up and Lessons Learned
- IR 4196090, U3 HP Turbine Casing has Two Steam Leaks
- IR 4196225, U3 Jet Pump 15 Failed Computer Portion of DOS 0202–02
- IR 4196458, 3–5741–19–PT–13, Drywell Temperature Point Failed
- IR 4198189, D3R25 Drywell Coating Assessment Report
- IR 4198194, D3R25LL: EMD Performance

- DFP 0800–01, Master Refueling Procedure, Revision 50
- DFP 0800–07, Fuel Movements During Refueling Operations, Revision 40
- DFP 0800–91, New Fuel Receiving, Revision 03
- DFP 0800-92, New Fuel Preparation and Storage, Revision 04
- DFP 0800–93, Fuel Bundle, Channel and Channel Fastener Inspection Checklist, Revision 05
- DFP 0850–01, Slow or Rapid Water Level Loss in Fuel Pool/Reactor Cavity, Revision 17
- DGP 02–02, Reactor Vessel Slow Fill, Revision 49
- DGP 04–01, Fuel Moves and Refueling, Revision 39
- DMP 5800–18, Load Handling of Heavy Loads and Lifting Devices, Revision 29
- DOA 1900–01, Loss of Fuel Pool Cooling, Revision 29
- DOP 1000–09, Bypassing Shutdown Cooling Isolation, Revision 04
- DOP 1600–22, Drywell Entry (Initial, Following Closeout, or At Power), Revision 28
- DOP 1900–03, Reactor Cavity, Dyer/Separator Storage Pit and Fuel Pool Level Control, Revision 56
- DOS 0201–02, Unit 3 RPV ASME B & PV Code 1000 PSI Leakage Test, Revision 61
- LS–AA–119, Fatigue Management and Work Hour Limits, Revision 12
- MA–AA–716–008, Foreign Material Exclusion Program, Revision 14
- MA–AA–716–008–1008, Reactor Services Refuel Floor FME Plan, Revision 13
- MA–AB–756–600, Reactor Disassembly, Revision 25
- OU–AA–103, Shutdown Safety Management Program, Revision 20
- Various Transient Combustible Permits for D3R25
- Various Clearance Orders
- EC 625537, Alternate Decay Heat Removal (ADHR) Qualification for D3R25
- EC 625538, D3R25 Spent Fuel Pool Cooling Evaluation During Transition to ADHR, Revision 00

71111.22—Surveillance Testing

- DOS 7000–01, Local Leak Rate Testing of Main Steam Isolation Valves (Dry Tests), Revision 09
- IR 4189262, D3R25 LLRT 3–0203–1C Exceeded Tech Spec Limit of <34 SCFH
- IR 4189257, D3R25 LLRT 3–0203–1A Exceeded Tech Spec Limit of <34 SCFH
- IR 4160682, Contingency WO Required for 2C MSIV
- DOS 7000–08, Local Leak Rate Testing of Primary Containment Isolation Valves, Revision 14
- DOS 7000–18, Local Leak Rate Testing of Unit 2 (3) Reactor Water Cleanup (RWCU) System Valves, Revision 06
- WO 04848728, Failed Leak Rate on RWCU 3–1201–1
- WO 01968522, Primary Containment Leakage Rate Summation
- WO 01965515, As-Found LLRT of RWCU Valves 1201–2 and 1201–3
- WO 01783268, As-Found LLRT of RWCU Valves 1201–1 and 1201–1A
- WO 01594078, Replace RWCU Regenerative Heat Exchanger Shell Side Relief Valve
- DAP 07–44, Control of Temporary Openings in Secondary Containment During Performance of Work Packages, Surveillance, or Other Procedures, Revision 15
- DTP 47, Leak Rate Testing Program, Revision 21
- ER–AA–380, Primary Containment Leakrate Testing Program, Revision 11
- DOS 6600-04, Bus Undervoltage and ECCS Integrated Functional Test for Unit 3 Diesel Generator, Revision 55
- DIS 0263–13, Unit 3 ATWS RPT/ARI Logic System Functional Test, Revision 18
- IR 4191308, No Open or Tripped Indication for Breaker Feed to 480V Switchgear 37
- IR 4191321, Erratic Reactor Water Level Medium Level Indication
- IR 4191364, 3C CCSW Pump Breaker Replacement

- IR 4191393, Feed Breaker to Gatehouse MCC 9908 Needs Replaced
- IR 4191394, 3B CRD Pump Breaker Swap
- IR 4191617, UPS Trouble
- WO 01791061, TS Bus 34–1 UV and ECCS Integrated Functional Test
- WO 04598087, TS ATWS RPT/ARI Logic System Functional Test
- IR 4184449, Entered DOA 440–01 and DOA 6500–10 (2C Circ Water Trip)
- 50.59 Screening No. 2009-0197, Rev. 0 for EC 371844, EC 371845
- DIS 1400–05, 2C(3C) Circulating Water Pump Breaker Control Power, Revision 42
- Drawing: 262LN001-002, 4KV & 480V Buses, Revision 04

71114.04—Emergency Action Level and Emergency Plan Changes

- EP-AA-1004, Addendum 3; Emergency Action Levels for Dresden Station; Revisions 5, 6, 7, and 8
- EP-AA-1004; Exelon Nuclear Radiological Emergency Plan Annex for Dresden Station; Revisions 35, 36, and 37
- Evaluation No. 17-71; 50.54(q) Program Evaluation/Assessment Review; 08/23/2017
- Evaluation No. 17-78; 50.54(q) Program Evaluation/Assessment Review; 06/15/2017
- Evaluation No. 17-104; 50.54(q) Program Evaluation/Assessment Review; 10/18/2017
- Evaluation No. 18-12; 50.54(q) Program Evaluation/Assessment Review; 04/16/2018

71124.01—Radiological Hazard Assessment and Exposure Controls

- IR 04194509, NRC Comment and Feedback During the Dresden U-3 Outage Inspection
- IR 04192147, PCEs Received Working at Risk Summary
- IR 04096525, H-13 Review of Vendor ARCO Enterprises, Inc., Respiratory Program
- IR 04195633, Worker Received 80.6 mrem Alarm on a Set-point of 80 mrem
- IR 04163737, ED Dose Rate Alarm from Greater than Seven Feet Entry
- IR 04187635, ARCO Enterprise Respiratory Program Validation for D3R25
- RP-AA-461, Radiological Controls for Contaminated Water Diving Operations in Torus, Revision 7
- NISP-RP-005, Access Control for High Radiation Areas Briefing for U-3 Torus Dive
- National Source Tracking System, Confirmatory Form 2018 Annual Inventory Reconciliation
- RWP DR-03-18-00509, D3R25 Drywell MSIV Activities, Revision 0
- RWP DR-03-18-00906, D3R25 Refuel Floor Facility Cavity Decontamination, Revision 0
- RWP DR-03-18-00901, D3R25 Reactor Disassembly Reassembly Activities, Revision 0
- RWP DR-03-18-00510, D3R25 Drywell ERV, SRV, and Target Rock, Revision 0

71124.02—Occupational As Low As Reasonably Achievable Planning and Controls

- Station ALARA Committee Meeting Minutes, Expanded scope for Found Condition for Unit-3 C MSIV Activities
- ALARA Review RWP DR-03-18-00509, D3R25 Drywell MSIV Activities: Revision 0
- ALARA Review RWP DR-03-18-00906, D3R25 Refuel Floor Facility Cavity Decontamination, Revision 0
- ALARA Review RWP DR-03-18-00901, D3R25 Reactor Disassembly Reassembly Activities, Revision 0
- ALARA Review RWP DR-03-18-00510, D3R25 Drywell ERV, SRV, and Target Rock, Revision 0
- RP-AA-400, ALARA Program, Revision 15
- RP-AA-401, Operational, ALARA Planning and Controls, Revision 24

- RP-AA-441, TEDE ALARA Evaluation, Revision 10

71124.05—Radiation Monitoring Instrumentation

- IR 04165249, Source too Weak to Reliably Perform Argos Sensitivity Check
- IR 04176235, Unit-3 Adsorber Vault Rad Downscale
- AR 04190204, Telepole Out of Tolerance Trending
- RP-AA-700-1240, Argos-5 Calibration Data Sheet 1012-305
- RP-AA-700, Out of Tolerance Report on Telepole, Revision 5
- Certificate of Calibration 0011130643, Ludlum 3030P Alpha Radiation Detection Device, 10/24/2018
- CM-11 Calibration Sheet No. 19254, 10/17/2018
- PM-12 Calibration Data Sheet No. 122, 09/18/2018
- PM-7 Portal Monitor Calibration Data Sheet Portal No. 7, 08/24/2018
- SAM-12 Calibration Data Sheet SN 1203SAM12096, 10/12/2018

71151—Performance Indicator Verification

- LS-AA-2140, Monthly Data Elements for NRC Occupational Exposure Control Effectiveness Data Reviewed from December 2017 through October 2018
- LS-AA-2150, Monthly Data Elements for RETS/ODCM Radiological Effluent Occurrences Data Reviewed from September 2017 through September 2018

71152—Problem Identification and Resolution

- IR 0839830, 3–1501–26A Leaking – Known Issue
- IR 4150630, K–10 CRD Temp High Alarm
- IR 4182770, Operations Crew 6 Clock Reset
- IR 4183248, U3 CRD K–10 RPIS Issue
- IR 4189512, 3A LPCI LOOP Injection Valve Leak
- IR 4189849, U3 IRM 18 Erratic Behavior
- IR 4190877, MO 3–1501–19B LLRT Exceeds Warning Limit
- IR 4192395, Intermittent Drift Indication for G–5
- IR 4192611, Varglas Not Properly Installed
- IR 4192816, Unexpected Channel ‘A’ Half Scram
- IR 4193137, IRM 15 Spike Causes Half Scram
- IR 4193146, No RPIS Indication for Position 48 for Rod K-10
- IR 4193275, RPV Head Experienced Leveling Issues during Installation
- IR 4193277, CRD K–13 Indicating Between 7 and -242 degrees Fahrenheit
- IR 4193280, CRD M–4 Indicating Over-Temperature
- IR 4193392, Unexpected Channel ‘A’ Half Scram Unit 3
- IR 4193543, Head Flange Thermocouple is Reading Open
- IR 4193897, 903–5 RPIS Indication for CRD C–6 – Rod Drift
- IR 4193977, Unexpected Alarm 903–4 A–11 RWCU Auxiliary Pump 3–1206 Trip
- IR 4193978, D3R25LL: Reactor Water Level during Lineup of Feedwater System
- IR 4194219, Cyber Security Review Not Performed for IRM/SRM Recorder MOD
- IR 4194220, Site Cyber Security Review Not Obtained for Conitel Mod
- IR 4195032, CRD HU 38-39 K-10 Rod Drive Temp High Alarm
- IR 4195783, Fire Piping Troubleshooting Issues
- IR 4196525, D3R25 Lessons Learned

- IR 4197782, Fire System Actuation due to Welding by 2A IAC
- IR 4198793, 903–17 Terminal E8 Broken
- DOA 0600–01, Transient Level Control, Revision 631
- DOP 3200–01, Reactor Feedwater System Fill and Vent, Revision 23
- DGP 01–S1, Start-Up Checklist, Revision 101
- Drawing: M-347, Diagram of Reactor Feed Piping, Revision CJ
- WO 01799328, Overhaul the Actuator for 3B Feedwater Regulating Valve (FWRV)
- WO 04601005, 3B FWRV Repack, Lube Actuator, Perform Flow Scan
- WO 04824713, FWLC Alarm Messge for 3B FRV
- IR 4185966, Erratic Operation of 2B FWRV
- IR 4071208, 2–0642–B Center O-Ring Blowing By
- WO 04844505, Erractic Operation of 2B FWRV

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

- March 2018 FW Check Valve LLRT Failures Whitepaper
- Root Cause Report 1336479-02, Feedwater PCIV and IST Check Valve Testing Failure Root Cause
- IR 4069678, D2R25 LLRT for 2-220-58A Above Acceptance Criteria
- IR 4069673, D2R25 LLRT for 2-220-62A Above Acceptance Criteria
- WO 01370227, D2R25 LLRT for 2-220-58A Above Acceptance Criteria
- WO 01491672, D2 30 M TS Pri Containment Type B&C Leakage Rate Test Summary
- WO 01696509, D2 30M TS Pri Containment Type B&C Leakage Rate Test Summary
- WO 01883264, D2 30 M TS Pri Containment Type B&C Leakage Rate Test Summary
- EC 399633, FW Check Valve Test Taps "A" Loop U2 Contingency Configuration
- DOS 7000-26, Local Leak Rate Testing of Unit 2(3) Feedwater System Valves, Revisions 07, 08, & 09
- MA-DR-MM-4-02001, Feedwater Check Valve Repair of ‘O-Ring Style’ Seat and Disc Assembly, Revisions 06 & 09
- MA-DR-MM-4-02001, Feedwater Check Valve Repair of Seat and Disc Assembly, Revision 05