



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

February 13, 2019

EA-16-022

Mr. Mark Bezilla
Site Vice President
FirstEnergy Nuclear Operating Co.
Davis-Besse Nuclear Power Station
5501 N. State Rte. 2, Mail Stop A-DB-3080
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION—NRC INTEGRATED INSPECTION
REPORT 05000346/2018004 AND ASSESSMENT OF CONFIRMATORY ORDER
EA-16-022

Dear Mr. Bezilla:

On December 31, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Davis-Besse Nuclear Power Station. On January 9, 2019, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report. The inspectors also held a Regulatory Performance Meeting and discussed, with you and members of your staff, the implementation of your corrective actions to address the causes for a failure of an auxiliary feedwater pump. We reviewed those corrective actions as part of our inspection documented in inspection report 05000346/2018040 (ADAMS Accession Number ML18353B599).

Based on the results of this inspection, no findings or violations were identified.

The inspection also confirmed your implementation of Confirmatory Order EA-16-022, issued to you by the NRC on September 1, 2016. The Confirmatory Order was issued as a result of a successful Alternative Dispute Resolution session conducted on July 21, 2016. Based on the review, the inspectors determined that the corrective actions taken by you adequately addressed the Confirmatory Order. On January 7, 2019, the inspectors presented the results of this review to Mr. D. Huey, Director, Performance Improvement, and other members of your staff. The actions required by this Confirmatory Order have been completed.

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/

Julio Lara, Director
Region III
Division of Reactor Projects

Docket Nos. 50-346
License Nos. NPF-3

Enclosure:
Inspection Report 05000346/2018004

cc: Distribution via LISTSERV®

Letter to Mark Bezilla from Julio Lara dated February 13, 2019

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION—NRC INTEGRATED INSPECTION
REPORT 05000346/2018004 AND ASSESSMENT OF CONFIRMATORY
ORDER 16-022

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ADAMS Accession Number: ML19045A141

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Numbers: 50–346

License Numbers: NPF–3

Report Numbers: 05000346/2018004

Enterprise Identifier: I–2018–004–023

Licensee: FirstEnergy Nuclear Operating Company (FENOC)

Facility: Davis-Besse Nuclear Power Station

Location: Oak Harbor, OH

Dates: October 1, 2018 through December 31, 2018

Inspectors: D. Mills, Senior Resident Inspector
J. Harvey, Resident Inspector
R. Baker, Senior Operations Engineer
J. Neurauter, Senior Reactor Inspector
J. Seymour, Operations Engineer
J. Cassidy, Senior Health Physicist
M. Garza, Emergency Preparedness Inspector
D. Reeser, Operations Engineer
J. Rutkowski, Project Engineer

Approved by: D. Szwarc, Acting Chief
Branch 2
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 Davis-Besse Power Plant in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

List of Findings and Violations

No findings or violations were identified.

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
Order	05000346/-00 EA-16-022	ML16245A488 Items 1-10	92702	Reviewed
LER	05000346/2016008-00	Application of Technical Specification for the Safety Features Actuation System Instrumentation	Other Activities	Closed

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PLANT STATUS

The unit remained at or near full power for the entirety of the inspection period.

On April 25, 2018, FirstEnergy Solutions (FES) / FirstEnergy Nuclear Operating Company (FENOC) notified the U.S. Nuclear Regulatory Commission (NRC) that they intend to shut down all four of their operating nuclear power plants (ADAMS Accession Number ML18115A007). Based on that notification, the first to shut down will be Davis-Besse, by May 31, 2020. On March 31, 2018, FES, FirstEnergy Nuclear Generation (FENGEN), and FENOC filed for bankruptcy. The NRC continues to maintain focus on public health and safety and the protection of the environment. This will include a continuous evaluation by inspectors to determine whether the licensee's financial condition is impacting safe operation of the plant.

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—Winter Readiness (1 Sample)

The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal cold temperatures. Sample completed November 11, 2018 – November 17, 2018.

External Flooding (1 Sample)

The inspectors evaluated for readiness to cope with external flooding. Sample completed November 11, 2018 – November 17, 2018.

71111.04—Equipment Alignment

Partial Walkdown (4 Samples)

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

- (1) Containment spray train 1 during containment spray train 2 planned testing. Sample completed October 21, 2018 – October 27, 2018;

- (2) Offsite alternating current sources lineup during a planned K-bus outage. Sample completed October 28, 2018 – November 3, 2018;
- (3) Auxiliary feedwater train 2 during auxiliary feedwater train 1 planned maintenance. Sample completed October 28, 2018 – November 10, 2018; and
- (4) Emergency diesel generator 2 during emergency diesel generator 1 planned maintenance. Sample completed December 9, 2018 – December 15, 2018.

Complete Walkdown (1 Sample)

The inspectors evaluated system configurations during a complete walkdown of the auxiliary feedwater system. Sample completed December 16, 2018 – December 22, 2018.

71111.05AQ—Fire Protection Annual/Quarterly

Quarterly Inspection (4 Samples)

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

- (1) Cable spreading room (fire area DD) and cable spreading room ladder space (fire area CC). Sample completed November 4, 2018 – November 10, 2018;
- (2) Control room and adjacent support rooms (fire area FF). Sample completed November 18, 2018 – November 24, 2018;
- (3) Station blackout diesel and associated electrical equipment room. Sample completed December 9, 2018 – December 15, 2018; and
- (4) Mechanical penetration rooms 1 and 3 (fire area AB). Sample completed December 16, 2018 – December 22, 2018.

71111.06—Flood Protection Measures

Internal Flooding (2 Samples)

- (1) The inspectors evaluated internal flooding mitigation protections in the intake structure including the service water pump and strainer room. This sample was initiated during the third quarter inspection period and completed during the inspection period covered by this report; and
- (2) The inspectors evaluated internal flooding mitigation protections in the emergency core cooling system room 2. Sample completed December 16, 2018 – December 22, 2018.

71111.11—Licensed Operator Requalification Program and Licensed Operator Performance

Operator Requalification (1 Sample)

The inspectors observed and evaluated operations during the Emergency Response Organization drill on October 23, 2018.

Operator Performance (1 Sample)

The inspectors observed and evaluated reactor power changes and operator performance during the weeks ending October 13, 2018, and October 20, 2018, including power changes in support of control rod drive exercise and turbine valve testing.

Operator Exams (1 Sample)

The inspectors reviewed and evaluated requalification examination results on December 17, 2018.

Operator Requalification Program (1 Sample)

The inspectors evaluated the operator requalification program from November 26, 2018, to December 7, 2018.

71111.12—Maintenance Effectiveness

Routine Maintenance Effectiveness (2 Samples)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

- (1) Station blackout diesel generator and its ventilation. Sample completed November 11, 2018 – November 17, 2018; and
- (2) Emergency diesel generator 1 planned maintenance and unavailability. Sample completed December 16, 2018 – December 22, 2018.

Quality Control (1 Sample)

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

- (1) Core spray pump 1 planned maintenance. Sample completed December 2, 2018 – December 8, 2018.

71111.13—Maintenance Risk Assessments and Emergent Work Control (3 Samples)

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

- (1) Planned K-bus and startup transformer 02 outage and steam feed rupture control system half-trip. Sample completed October 28, 2018 – November 3, 2018;
- (2) Auxiliary feedwater train 1 out of service for planned maintenance. Sample completed November 11, 2018 – November 17, 2018; and
- (3) Emergency diesel generator 1 out of service for planned maintenance. Sample completed December 9, 2018 – December 15, 2018.

71111.15—Operability Determinations and Functionality Assessments (1 Sample)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Startup transformer 02 inoperable due to failed fuse. Sample completed November 25, 2018 – December 1, 2018.

71111.19—Post Maintenance Testing (5 Samples)

The inspectors evaluated the following post maintenance tests:

- (1) High pressure injection 1 following planned maintenance. Sample completed October 21, 2018 – October 27, 2018;
- (2) Auxiliary feedwater 1 following planned maintenance. Sample completed November 4, 2018 – November 10, 2018;
- (3) Safety features actuation system channel 4 replacement of 1/1 converters for containment pressure. Sample completed November 18, 2018 – November 24, 2018;
- (4) Containment spray pump 1 following planned maintenance. Sample completed December 9, 2018 – December 15, 2018; and
- (5) Emergency diesel generator following planned maintenance. Sample completed December 9, 2018 – December 15, 2018.

71111.22—Surveillance Testing

The inspectors evaluated the following surveillance tests:

Routine (2 Samples)

- (1) Control rod drive exercise, DB-S-3272. Sample completed October 14, 2018 – October 20, 2018; and
- (2) Main turbine stop valve testing, DB-SS-04150; main turbine control valve testing, DB-SS-04151; and main turbine combined intermediate valve testing, DB-SS-04152. Sample completed October 14, 2018 – October 20, 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 December 7, 2018. This evaluation does not constitute NRC approval. No findings or violations were identified.

RADIATION SAFETY

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) Radiation Work Permit 2018-5104; Reactor Head Disassembly / Reassembly Work Activities; Sample spanned several weeks during this report period;
- (2) Radiation Work Permit 2018-5015; Scaffold Work Activities in Containment ; Sample spanned several weeks during this report period;
- (3) Radiation Work Permit 2018-5019; In Service Inspection (ISI) Work Activities in Containment; Sample spanned several weeks during this report period; and
- (4) Radiation Work Permit 2018-5050; HP80 Repair Activities; Sample spanned several weeks during this report period.

Verification of Dose Estimates and Exposure Tracking Systems (1 Sample)

The inspectors evaluated dose estimates and exposure tracking.

Implementation of As Low As Reasonably Achievable and Radiological Work Controls (1 Sample)

The inspectors reviewed as low as reasonably achievable (ALARA) practices and radiological work controls by reviewing the following activities:

- (1) Radiation Work Permit 2018–5104; Reactor Head Disassembly/Reassembly Work Activities;
- (2) Radiation Work Permit 2018–5015; Scaffold Work Activities in Containment ;
- (3) Radiation Work Permit 2018–5019; ISI Work Activities in Containment; and
- (4) Radiation Work Permit 2018–5050; HP80 Repair Activities.

OTHER ACTIVITIES—BASELINE

71151—Performance Indicator Verification (4 Samples)

The inspectors verified licensee performance indicators submittals listed below:

- (1) BI01: Reactor Coolant System (RCS) Specific Activity Sample-1 Sample (April 2017 – September 2018);
- (2) BI02: RCS Leak Rate Sample-1 Sample (October 2017 – September 2018);
- (3) OR01: Occupational Exposure Control Effectiveness-1 Sample (April 2017 – September 2018); and
- (4) PR01: RETS/ODCM Radiological Effluent Occurrences-1 Sample (October 2017 – September 2018).

71152—Problem Identification and Resolution

Annual Follow-Up of Selected Issues (3 Samples)

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

- (1) Condition Report (CR) 2018–08424: Non-approved material used in spent fuel pool;
- (2) EN–DP–02511: Follow-up review of licensee periodic shield building core bore visual examinations for concrete laminar cracking; and
- (3) CR 2016–9073 and CR 2017–07832: Follow-up review of licensee corrective actions related to identified shield building laminar cracking.

OTHER ACTIVITIES—TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

Licensee Event Reports

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

LER 2016–008–00 Application of Technical Specification for the Safety Features Actuation System Instrumentation is closed. The supplement LER 2016–008–01 was closed in Inspection Report 05000346/2018002. This did not constitute a sample.

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

On September 1, 2016, Confirmatory Order EA–16–022 (ADAMS Accession Number ML16245A488) was issued by the NRC to the licensee as the result of a settlement reached during a successful Alternative Dispute Resolution (ADR) session conducted on July 21, 2016. Additional details of the apparent violations associated with this ADR are documented in NRC Inspection Report 05000346/2016008 and Investigation Report No. 3–2015–009.

This inspection was conducted in accordance with IP 92702, “Follow Up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory Orders.” The inspection objective was to determine that adequate corrective actions have been implemented and maintained for enforcement actions.

The inspectors reviewed the licensee’s responses to the Confirmatory Order to ascertain that the licensee’s responses and stated corrective and preventative actions were timely and appropriate.

The licensee documented the associated responses to the Confirmatory Order in Request to Close Commitment Tracking Item reports DB–EA–16–022–01, DB–EA–16–022–02, DB–EA–16–022–03, DB–EA–16–022–04, DB–EA–16–022–05, DB–EA–16–022–06, DB–EA–16–022–07, DB–EA–16–022–08, DB–EA–16–022–09, and in Letter L–18–246.

The inspectors determined that the licensee’s responses to the Confirmatory Order and stated corrective and preventative actions were timely and appropriate.

No findings were identified.

Evaluation of Davis-Besse Safety Condition in Light of Financial Conditions

The licensee’s parent company, FirstEnergy Solutions, was under bankruptcy protection/reorganization during the inspection period. As such, NRC Region III conducted special reviews of processes at Davis-Besse. Using the flexibilities in the baseline inspection program, the inspectors evaluated several aspects of the licensee’s operations to assess whether any identified plant performance issues could be related to the station’s financial condition. The factors reviewed included: (1) impact on regulatory-required plant staffing; (2) corrective maintenance backlog; (3) changes to the planned maintenance schedule; (4) corrective action program implementation; and (5) reduction in outage scope, including risk-significant modifications. In particular, the inspectors verified that licensee personnel continued to identify problems at an appropriate threshold and enter these problems into the corrective action program for resolution. The inspectors also verified that the licensee continued to develop and implement corrective actions commensurate with the safety significance of the problems identified.

The review of processes at Davis-Besse included continuous reviews by the Resident Inspectors, as well as the specialist-led baseline inspections completed during the inspection period which are documented previously in this report.

INSPECTION RESULTS

71152—Problem Identification and Resolution

<p>Observation-Selected Issue Follow Up for EN-DP-02511: Follow-Up Review of Licensee Periodic Shield Building Core Bore Visual Examinations for Concrete Laminar Cracking</p>	<p>71152—Annual Sample Review</p>
<p>As part of the continued long term monitoring of the shield building laminar cracking condition documented in inspection report (IR) 05000346/2014008 (ADAMS Accession Number ML15148A489), the licensee subjected a sample of existing shield building core bores to visual examination as prescribed by licensee procedure EN-DP-01511, “Structures Monitoring.” One purpose of the core bore visual examinations conducted under this procedure was to determine if any growth or change in the nature of the cracks had occurred by measurement of crack width and comparison to historical values. In areas of identified laminar crack planar propagation, additional impulse response mapping is performed to provide a relative indication of the extent of propagation.</p> <p>During the course of this in-depth review, the inspectors verified the status of the licensee’s core bore visual examinations, as well as their evaluations and corrective action documents resulting from shield building laminar cracking not identified by previous visual examinations. In addition, the inspectors reviewed the licensee’s plans for follow-on examinations and corrective actions that had been established to verify that the classification, prioritization, focus, and timeliness of these actions were commensurate with the safety significance of the issue.</p> <p>During the 2018 periodic examination, the licensee identified additional growth in laminar crack width and documented the growth in the corrective action program. In some instances, the measured laminar crack width exceeded the crack widths induced during testing previously performed at selected universities referenced in IR 05000346/2014008 to credit full reinforcement capacity in those areas. Laminar crack propagation was also observed at some locations based on visual examination and was similar to the predicated propagation pattern.</p> <p>As a result of the increased crack width, the licensee performed operability evaluations of the shield building and determined that the shield building remained operable based on the increased crack widths being localized in nature and engineering calculations that conservatively assume reinforcement is not effective in areas of laminar cracking. The inspectors reviewed the licensee’s operability determinations and determined as reasonable the licensee’s assessment that the shield building remained capable of performing its intended safety function.</p> <p>Corrective actions completed or planned to date include, but are not limited to, concrete removal and repair, and rebar inspection at two locations to determine the corrosion potential of the shield building reinforcement; concrete removal and repair to remove the shoulder at one location, and development of a comprehensive plan for re-establishing shield building conformance to the design and licensing basis of the facility with the increase in crack widths.</p>	

As a result of the observed increases in laminar crack width, the licensee postponed its planned license amendment submittal to allow time for additional analysis and development of potential mitigation strategies.

Observation-Selected Issue Follow-Up for CR 2016–09073 and CR 2017–07832: Follow-Up Review of Licensee Corrective Actions Related to Identified Shield Building Laminar Cracking	71152—Annual Sample Review
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The inspectors reviewed licensee corrective action activities associated with the removal and repair of concrete for rebar inspection to determine the corrosion potential of the shield building reinforcement.

As documented in CR 2016–09073 (shield building shoulder 13, bore S13–631.0–8), the licensee identified laminar crack growth including crack width that exceeded bounds of this parameter in tests that determined rebar splice strength. As a result, the licensee initiated Engineering Change Package (ECP) 17–0211–000, "Shield Building Concrete Removal and Repair for Rebar Inspection," to determine the corrosion potential of the shield building reinforcement. The inspectors reviewed and observed a sample of licensee documents and activities for concrete removal and repair at shoulder 13 including:

- ECP 17–0211–000 allowed shield building concrete removal and repair during plant operation. At shoulder 13, ECP 17–0211–000 removed a portion of shield building exterior concrete that was approximately 12.5 feet around the circumference (horizontal), 50 feet in height (vertical), and of varying depth to allow examination for rebar corrosion and to provide adequate bonding between replacement concrete and rebar. The inspectors reviewed licensee calculations that demonstrated that the shield building would be capable to perform its design basis safety functions throughout the concrete removal and repair activity. Specifically, the inspectors reviewed calculations that demonstrated the shield building maintained adequate radiation shielding, barrier protection for tornado missiles, and structural capacity during an earthquake while in a degraded condition with concrete removed.
- The inspectors verified that removal and repair of concrete was performed in accordance with licensee procedures and industry standards. In particular, the inspectors verified concrete excavation beyond structural rebar was sufficient to ensure adequate bonding between the replacement concrete and rebar.
- The inspectors directly observed a portion of exposed rebar during concrete removal. Inspectors noted evidence of rebar corrosion. The inspectors reviewed the licensee's criteria to remove and replace corroded rebar, the method to splice replacement rebar to existing rebar, and the test results that demonstrated rebar design strength would be achieved for mechanical splice components used in the repair.
- The inspectors directly observed licensee activities during one concrete replacement pour including testing of concrete prior to installation. Specifically, the inspectors observed that only concrete within slump, air entrainment, and temperature test acceptance ranges was installed. The inspectors also observed concrete placement into cylinders segregated for later testing to verify 28-day design compressive strength.
- Finally, the inspectors reviewed test reports that demonstrated the installed concrete cured to the 28-day minimum design compressive strength for each separate concrete pour.

As documented in CR 2017–07832, “Exterior Surface Crack on Shoulder 10”, the licensee identified a new vertical crack. As a result, the licensee initiated Design Change Package engineering change (EC) 18–0037–002, “Shield Building Shoulder 10 Removal,” to remove existing laminar cracking in shoulder 10 in addition to the vertical crack. As indicated in EC 18–0037–002, the repairs on shoulder 10 are to be performed while the unit is at power, and the Shield Building is required to be capable of performing its design functions within operability limits. Also indicated in EC 18–0037–002, when repairs are made to shoulder 10, the concrete will be restored to a cylindrical section without the shoulder.

At the time of this inspection, the licensee had not completed shoulder 10 repair activities associated with EC 18–0037–002. The inspectors reviewed a sample of licensee documents and activities for concrete removal and repair at shoulder 10 including:

- The inspectors reviewed the licensee’s interim calculation that evaluated the shield building's operability during the remediation process assuming the worst case scenario of maximum area of concrete removed to the maximum depth and maximum reinforcement removed. The maximum area of remediation included the combined effects of repairs to shoulder 13 performed simultaneously with repairs to shoulder 10.
- The inspectors reviewed a sample of field change requests and condition reports associated with EC 18–0037–02 activities.
- On November 14, 2018, during shoulder 10 repair activities, the licensee inadvertently sprayed the start-up O2 transformer and two individuals with wet concrete during clean-up after a successful concrete pour. When concrete was found to be setting up in the installed hard pipe, the licensee disconnected the hard pipe from the concrete truck boom and attempted to clear the pipe by pressurizing the high elevation side with compressed air. This resulted in the concrete in the pipe being ejected at the low elevation side. Both individuals were assessed by the health center and were determined to have no injuries. The licensee evaluated the start-up O2 transformer and determined it to be operable. The licensee entered this issue in to the corrective action program as condition report 2018–10197. The inspectors questioned the licensee regarding work management and the use of human performance tools. Specifically, the inspectors noted a two minute drill required the licensee to identify what can go wrong and the appropriate actions to prevent those issues. No violations were identified.

Observation-Selected Issue Follow Up for CR 2018–08424: Unapproved Chemical Consumable into the Spent Fuel Pool and CR 2018–08340: Foreign Material Introduced into Spent Fuel Pool	71152—Annual Sample Review
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On September 19, 2018, the licensee was performing spent fuel assembly inspections and identified that a chain attached to a pin on the latching pole used to move the spent fuel assemblies was hanging straight down. The chain was used to ensure the lock-pin on the latching pole would not become foreign material in the spent fuel pool (SFP). Upon inspection, the licensee discovered that a ring used to hold the chain to the pin was missing. The pins, chain and rings were subsequently secured to the latching pole with tape. The licensee identified the missing ring on the upper end fitting of a permanently discharged assembly, and subsequently removed the foreign material from the spent fuel pool. Upon questioning by the inspectors, the licensee was unable to provide a written evaluation and

determined that the use of tape in the spent fuel pool had not been formally evaluated. Upon discovering the unapproved condition, the licensee removed the tape from the SFP and replaced it with approved ty-wraps. Additionally, the licensee generated condition report 2018–08424, “Unapproved Chemical Consumable Introduced into the Spent Fuel Pool” and CR 2018–08340: Foreign Material Introduced into Spent Fuel Pool.

Title 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” requires, in part, that activities affecting quality be prescribed by documented procedures of a type appropriate to the circumstances and be accomplished in accordance with these procedures. The licensee established Procedure NOP–OP–3001, “Chemical Control Program,” Revision 26 as the implementing procedure for controlling chemicals used in or on structures, systems, or components. Specifically, that procedure was utilized to control chemicals used in the spent fuel pool activity affecting quality.

Procedure NOP–OP–3061, Step 2.2.6 states, in part, “that the use of tapes in or on plant systems, piping or components, meets the definition of ‘chemical’ and is required to be approved per the requirements of this procedure prior to use.” Step 4.2 states, in part, that, “the user of the chemical shall review the 3E Company portal per NOBP–OP–3001, Chemical Control 3E SDS and Permit Process, for the desired product or a currently approved product suitable for the intended use.” On September 19, 2018, the licensee failed to determine whether the tape was approved for use, as required by the procedure, before using the tape in the spent fuel pool area.

The inspectors determined that the licensee’s failure to use an approved material in the spent fuel pool was contrary to 10 CFR 50, Appendix B Criterion V and was considered a performance deficiency. The licensee’s failure to comply with Steps 2.2.6 and 4.2 of Procedure NOP–OP–3001, “Chemical Control Program,” constituted a minor violation that is not subject to enforcement action in accordance with the NRC’s Enforcement Policy.

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 October 18, 2018, the inspectors presented the ultimate radiation protection program inspection results to Mr. R. Patrick, Acting General Plant Manager, and other members of the licensee staff.
- On December 7, 2018, the inspectors presented the licensed operator requalification program inspection results to Mr. D. Huey, Performance Improvement Director, and other members of the licensee staff.
- On December 13, 2018, the inspectors presented the emergency preparedness inspection results to Mr. J. Vetter, Emergency Preparedness Manager, and other members of the licensee staff.
- On December 17, 2018, the inspectors presented the completed 2018 LORT annual operating test and biennial written examination inspection results to Mr. J. Phillippe, Superintendent, Nuclear Operations Training, per teleconference.
- On January 7, 2019, the inspectors presented the follow-up on enforcement actions

- inspection results to Mr. D. Huey, Director, Performance Improvement, and other members of the licensee staff.
- On January 9, 2019, the inspectors presented the quarterly integrated inspection results to Mr. M. Bezilla and other members of the licensee staff.

DOCUMENTS REVIEWED

71111.01—Adverse Weather Protection

- Letter L-17-176; Focused Evaluation Regarding Near-Term Task Force Recommendation 2.1 for Flooding (CAC No. MF3721); 07/11/2017
- Procedure DB-OP-06913; Seasonal Plant Preparation Checklist; Revision 31
- Procedure RA-EP-2870; Station Isolation; Revision 7

71111.04—Equipment Alignment

- CR 2013-11188; Small Oil Leak on AFP 2; 07/21/2013
- CR 2016-01832; Selective Leaching Identified during Destructive Testing of Removed Auxiliary Feed Pump Turbine Governor Oil Cooler 1-2; 02/08/2016
- CR 2018-07738; AFP 2 is Experiencing Unexpected Oscillations in Speed at the HSS; 08/29/2018
- CR 2018-10582; AFP 2 HSS Light is Out After Bulb Replacement; 12/01/2018
- CR 2013-11188; Small Oil Leak on AFP 2; 07/21/2013
- CR 2017-06431; Deterioration of AFPT 2 Support Pedestal; 06/09/2017
- CR 2018-03216; YV4 Inverter Supplying Load Light not Lit During Weekly Onsite AC Surveillance DB-SC-03041; 04/07/2018
- CR 2018-04406; Unexpected Annunciator 1-2-E, SU XMMR 01DNDR Received During Removal of MCC E31A From Service; 05/11/2018
- Drawing M-0060; Auxiliary Feedwater System; Revision 60
- Drawing M-017A; Diesel Generators; Revision 22
- Drawing M-017B; Diesel Generators Air Start; Revision 47
- Drawing M-017C; Fuel Oil; Revision 32
- Drawing OS-005; Containment Spray System; Revision 14
- Drawing OS-041A SH 1; Emergency Diesel Generator Systems Revision 35
- Drawing OS-041A SH 2; Emergency Diesel Generator Systems; Revision 33
- Drawing OS-041B; Emergency Diesel Generator Start/Engine Air System; Revision 42
- Drawing OS-041C; Emergency Diesel Generator Diesel Oil System; Revision 19
- Drawing OS-057 SH 1; Operational Schematic 13.9kv System; Revision 12
- Procedure DB-OP-02000; RPS, SFAS, SRCS Trip, Or SG Tube Rupture; Revision 30
- Procedure DB-OP-03004; Locked Valve Verification; Revision 28
- Procedure DB-OP-03005; Capped Valve Verification; Revision 19
- Procedure DB-OP-06013; Containment Spray; Revision 27
- Procedure DB-OP-06233; Auxiliary Feedwater System Train 2; Revision 44
- Procedure DB-OP-06316; Attachment 13: Conditions Affecting EDG Operability; Revision 60
- Procedure DB-PF-03016; EDG Valve Testing; Revision 11
- Procedure DB-SC-03023; Offsite AC Sources Lined Up and Available; Revision 34
- WO 200686502; Locked Valve Verification FI Norm; 03/19/2018
- WO 200700618; Capped Valve Verification; 12/08/2018

71111.05AQ—Fire Protection Annual/Quarterly

- CR 2018-09690; Combustible Controls for Staged Fiber Optic Cable in Cable Spreading Room; 11/01/2018
- Design Interface Evaluation; ECP 15-0134-000 Plan Computer Replacement Modification; Revision 2
- Fire Hazard Analysis; Fire Area Evaluation for Fire Area AA
- Fire Hazards Analysis; Fire Area Evaluation for Fire Area DD
- NOP-CC-2004-07; ECP 15-0134-000 Plant Computer Replacement Modification; Revision 2
- Pre-Fire Plan PFP-AB-208; No. 1 Mechanical Penetration Room and Pipe Way Area, Rooms 202, 208, and 208DC, Fire Area AB; Revision 7
- Pre-Fire Plan PFP-AB-303; No. 3 Mechanical Penetration Room Rooms 303 and 303PC, Fire Area AB; Revision 6
- Pre-Fire Plan PFP-AB-422B; Cable Spreading Room Ladder Space; Revision 4
- Pre-Fire Plan PFP-S6-0000; Service Building 6, Laydown Area, Station Black-Out Diesel; Revision 4
- Procedure DB-FP-00007; Control of Transient Combustibles; Revision 14
- Procedure EN-DP-01141; FHAR Updating; Revision 3
- Procedure NG-DB-00302; DBNPS Fire Protection Program; Revision 11
- Procedure PFP-AB-422B; Cable Spreading Room Ladder Space; Revision 4
- Procedure PFP-AB-505; Protected Area Pre-Fire Plan; Revision 8
- Regulator Applicability Determination; ECP 15-0134-000; Revision 1

71111.06—Flood Protection Measures

- CR 2018-07867; Maintenance Rule; 10/04/2018
- CR G201-2001-0009; Barrier Penetration Inspections; 01/03/2001
- Drawing A-2111; Barrier Penetration Drawing Barrier Identification Plan RM. 2 Intake Structure Elevation 576'0"; Revision 0
- Drawing A-2219; Barrier Penetration Drawing Barrier 314-N2 Auxiliary Building; Revision 2
- Drawing M-165; Piping Tunnel and Intake Structure; Revision 5
- Procedure DB-FP-04038; Ten Percent Penetration Seal Visual Inspection; Revision 9
- Procedure DBRM-DBDE-0002; Penetration Seal Inspection Population; Revision 2
- Procedure NOP-ER-3004; FENOC Maintenance Rule Program; Revision 5
- Procedure NORM-ER-3208; Penetrations and Barriers; Revision 1
- Procedure RA-EP-02880; Internal Flooding; Revision 4

71111.11—Licensed Operator Requalification Program and Licensed Operator Performance

- 2017-05485; Plant Transient Due to Feedwater Temperature Excursion While Attempting to Recover HPFW Heater 1-6 from High Level Trip
- 2017-05860; Operating Crew Performance Critique for 1-5 and 1-6 High Pressure Feedwater Trips
- 2017-09686; Clearance Event Due to Incomplete Isolation to Support Work
- 2017-09797; Mis-Positioning of PCV 1358G
- 2018-02731; Surveillance Test Performed with Incorrect Revision of Procedure
- 2018-03036; Mis-Position of Make-Up Filter Outlet Isolation (MU177)
- 2018-03683; Step Change in Reactor Power during NI Calibrations
- 2018-08409; Data Entry Error for DB-SP-03357, RCS Water Inventory Balance, RCP 2-2 Seal Leakage
- 2018-10895; Ops Training-Potential Exam Security Event, Cell Phone

- 2nd, 3rd, and 4th Quarter 2018; Licensed Operator Proficiency Status; 11/19/2018
- DBBP-OPS-1013; Control of Time Critical Actions; Revision 2
- DBBP-TRAN-0014; License Requirements for Licensed Individuals; Revision 11
- DBBP-TRAN-0021; Simulator Configuration Control; Revision 7
- DBBP-TRAN-0501; Conduct and Development of Job Performance Measures; Revision 10
- DBBP-TRAN-0502; Continuing Training Simulator Evaluations; Revision 12
- Job Performance Measure; OPS-JPM-024; Revision 1
- Job Performance Measure; OPS-JPM-127; Revision 1
- Job Performance Measure; OPS-JPM-151; Revision 3
- Job Performance Measure; OPS-JPM-166; Revision 2
- Job Performance Measure; OPS-JPM-227; Revision 2
- Job Performance Measure; OPS-JPM-255; Revision 0
- Job Performance Measure; OPS-JPM-276; Revision 1
- Job Performance Measure; OPS-JPM-281; Revision 0
- Job Performance Measure; OPS-JPM-289; Revision 0
- Job Performance Measure; OPS-JPM-291; Revision 0
- List of Open Simulator Work Requests; 11/28/2016
- NOBP-TR-1112; Conduct of Simulator Training and Evaluation; Revision 8
- NOBP-TR-1151; 4.0 Crew Critique; Revision 7
- NOP-OP-1002; Conduct of Operations; Revision 13
- NOP-OP-1013; Control of Time Critical Operator Actions; Revision 3
- NOP-TR-1010; Licensed Operator Requalification Exam Development; Revision 3
- NOP-TR-1200; Conduct of Training; Revision 6
- NOP-TR-1280; FENOC Simulator Configuration Management; Revision 2
- Procedure DB-OP-02000; RPS, SFAS, SFRCS Trip, OR SG Tube Rupture; Revision 30
- Procedure DBRM-EMER-1500A; Davis-Besse Emergency Action Level Basis Document; Revision 8
- Procedure DB-SC-03272; Control Rod Exercising Test; Revision 6
- Procedure DB-SS-04150; Main Turbine Stop Valve Test; Revision 16
- Procedure DB-SS-04151; Main Turbine Control Test Valve; Revision 17
- Procedure DB-SS-04152; Main Turbine Combined Intermediate Valve Test; Revision 11
- Procedure RA-EP-02000; Medical Emergencies; Revision 6
- Remediation Training Packages (3); August 17 and 24, 2018
- Return to Active Status (Various RO & SRO Licenses); July and August 2018
- RO and SRO Biennial Written Examinations Administered During Week of December 3, 2018
- Scenario Based Testing; Scenario #ORQ-EPE-S140; 11/16/2018
- Simulator Performance Indicator Report; 11/19/2018
- Simulator Review Committee Minutes; Various from July 13, 2017 to October 23, 2018
- Simulator Scenario ORQ EPE S106; Revision 13
- Simulator Scenario ORQ EPE S108; Revision 13
- Simulator Scenario ORQ EPE S111; Revision 14
- Simulator Scenario ORQ EPE S114; Revision 11
- Simulator Scenario ORQ EPE S140; Revision 00
- Simulator Training Certification Test N3; Cycle 21 Zero Power Physics Testing; 07/24/2018
- Simulator Training Certification Test N6; Sixty Minute Drift Test; 11/30/2018
- Simulator Training Certification Test RTT Computer Real Time Test; 11/30/2018
- Simulator Training Certification Test TAB04; Simultaneous Trip of All Reactor Coolant Pumps; 08/12/2017
- Simulator Training Certification Test TAB04; Simultaneous Trip of All Reactor Coolant Pumps; 02/11/2018

- Simulator Training Certification Test TAB06; Main Turbine Trip from 40% - No Reactor Trip; 12/21/2017
- Simulator Training Certification Test TAB06; Main Turbine Trip from 40% - No Reactor Trip; 12/1/2018
- Simulator Training Certification Test TAB09; Main Steam Line Failure in the Reactor Building - Double Ended Shear; 08/26/2017
- Simulator Training Certification Test TAB09; Main Steam Line Failure in the Reactor Building - Double Ended Shear; 02/12/2018
- Simulator Training Certification Tests N1a, N1b, N1c, N1d, N1e, N1f, N1g, N2a, N2b; Annual Plant Startup and Shutdown Testing; November 5 through December 30, 2018
- WO 200692027; CRD Exercise Test; 10/13/2018
- WO 200692056; Main Turbine Stop Valves; 10/13/2018
- WO 200692057; Main Turbine Control Valve; 10/13/2018
- WO 200692058; Main Turbine CIV Test; 10/13/2018

71111.12—Maintenance Effectiveness

- CR 2017-11636; CRD Motor Generator Set Abnormal Noise; 11/23/2017
- CR 2018-04599; Hole in EDG 2 Air Intake Silencer; 05/17/2018
- CR 2018-07955; Unexpected Alarm During EDG 2 Testing; 09/07/2018
- CR 2018-10512; PA-DB-18-04 Assessment of Diesel Generator Maintenance Outage Readiness; 11/28/2018
- CR 2018-10835; Plastic Piece Broken During Testing of NTS Relay 2X1 in AC101; 12/10/2018
- CR 2018-10840; Need to Update Design Drawings; 12/10/2018
- CR 2018-10845; Minor Score Indication on Fuel Block on Engine Driven Fuel Oil Pump; 12/11/2018
- CR 2018-10846; RCP Oil Temperature Drop Following Testing; 12/11/2018
- CR 2018-10847; Replacement Spider for Engine Driven Fuel Oil Pump P205-1 is not Correct; 12/11/2018
- CR 2018-10859; During Performance of PSH20179 EDG 1 Crankcase Pressure Switch Replacement, Field Wires Found Terminated to Wrong Terminals; 12/11/2018
- CR 2018-10908; TS20157 Leaking Caused a Delay in Completion of EDG Outage
- CR 2018-10919; 1 EDG Ran Greater Than 30 Minutes Unloaded; 12/13/2018
- CR 2018-11113; Measuring Execution of Tech Spec Component/System Outage "Planned" Work Excludes "Discovery" Item(s); 12/19/2018
- CR 2018-11223; 1 Emergency Diesel Generator Outage Roll-Up Critique; 12/26/2018
- CR 2017-11636; CRD Motor Generator Set Abnormal Noise; 11/23/2017
- CR 2018-10512; PA-DB-18-0: Assessment of Diesel Generator Maintenance Outage Readiness; 11/28/2018
- CR 2018-10646; Containment Spray Pump #1 Motor Leads with Broken Strands; 12/04/2018
- CR 2018-10835; Plastic Piece Broken During Testing of NTS Relay 2X1 in AC101; 12/10/2018
- CR 2018-10840; Need to Update Design Drawings; 12/10/2018
- CR 018-10845; Minor Score Indication on Fuel Block on Engine Driven Fuel Oil Pump 12/11/2018
- CR 2018-10847; Replacement Spider for Engine Driven Fuel Oil Pump P205-1 is not Correct; 12/11/2018
- CR 2018-10859; Crankcase Pressure Switch was Found in a Non-Tripped, or Reset Position; 12/11/2018
- CR 2018-10859; During Performance of PSH20179 EDG 1 Crankcase Pressure Switch Replacement Field Wires Found Terminated to Wrong Terminals; 12/11/2018

- CR 2018-10908; TS20157 Leaking Caused a Delay in Completion of EDG Outage; 12/13/2018
- CR 2018-10919; EDG 1 Ran Greater than Thirty Minutes Unloaded; 12/13/2018
- CR 2018-10934; EDG 1 Cylinder 19 Injector Linkage Found Stuck; 12/13/2018
- Procedure DB-OP-06316; Diesel Generator Operating Procedure; Revision 60
- Procedure DB-OP-6316; EDG Operation
- Procedure DB-PF-03201; Emergency Diesel Generator Fuel Oil Storage Tank Transfer Pump 1 Flow Test; Revision 7
- Procedure DB-PF-3201; Fuel Oil Transfer
- Procedure DB-SC-03076; Emergency Diesel Generator 1 184 Day Test; Revision 37
- Procedure DB-SC-04226; Emergency Diesel Generator 1 Over-Speed Trip Test; Revision 3
- Procedure DB-SC-04335; Emergency Diesel Generator 1 Recrank Functional Test; Revision 0
- Procedure DB-SC-3076 184 Day Fuel Sequencer Test
- Procedure DB-SC-4226; Over-Speed Trip
- Procedure DB-SC-4335; Air Start Recrank
- Procedure NOP-ER-3004; FENOC Maintenance Rule Program; Revision 5
- WO 200767893; EDG 1 184 Day Test FA Norm; 12/14/2018

71111.13—Maintenance Risk Assessments and Emergent Work Control

- Procedure DBBP-OPS-0011; Protected Equipment Posting; Revision 13
- Procedure DB-MM-01009; Lubricant Sampling Methods; Revision 10
- Procedure DB-MM-01013; Lubricant Addition; Revision 10
- Procedure DB-OP-06334; SBODG Valve Checklist; Revision 27
- Procedure NOP-OP-1007; Risk Management; Revision 28

71111.15—Operability Determinations and Functionality Assessments

- CR 2018-10428; E16210, SU XFMR 02 to Bus B Voltmeter Indicates 6 KV; 11/24/2018
- Drawing E-1 SH.1; A.C. Electrical System One Line Diagram; Revision 39
- Drawing E-21 SH.2; 13.8KV Relay and Metering Three Line Diagram Bus-B; Revision 18
- Procedure DBRM-PES-0004; System Performance Monitoring; Revision 1
- Procedure NOBP-ER-3900; Equipment Reliability Common Definitions and Structure; Revision 10
- Procedure NOP-ER-101; Continuous Equipment Performance Improvement; Revision 6
- Procedure NOP-WM-3001; Work Management PM Process; Revision 17
- Procedure NORM-ER-3302; I and C Relays; Revision 4
- WO 200511129; Startup Transformer X02; 02/17/2014

71111.19—Post Maintenance Testing

- CR 2017-11636; CRD Motor Generator Set Abnormal Noise; 11/23/2017
- CR 2018-10512; PA-DB-18-04 Assessment of Diesel Generator Maintenance Outage Readiness; 11/28/2018
- CR 2018-10835; Plastic Piece Broken During Testing of NTS Relay 2X1 in AC101; 12/10/2018
- CR 2018-10840; Need to Update Design Drawings; 12/10/2018
- CR 2018-10845; Minor Score Indication on Fuel Block on Engine Driven Fuel Oil Pump; 12/11/2018
- CR 2018-10846; RCP Oil Temperature Drop Following Testing; 12/11/2018
- CR 2018-10847; Replacement Spider for Engine Driven Fuel Oil Pump P205-1 is not Correct; 12/11/2018

- CR 2018-10859; During Performance of PSH20179 EDG 1 Crankcase Pressure Switch Replacement, Field Wires Found Terminated to Wrong Terminals; 12/11/2018
- CR 2018-10908; TS20157 Leaking Caused a Delay in Completion of EDG Outage
- CR 2018-10919; 1 EDG Ran Greater Than 30 Minutes Unloaded; 12/13/2018
- CR 2018-11223; 1 Emergency Diesel Generator Outage Roll-Up Critique; 12/26/2018
- CR 2017-11636; CRD Motor Generator Set Abnormal Noise; 11/23/2017
- CR 2018-10483; 5-4-B, SAS CTMT Press Lo Fail Slow to Respond During Testing of SFAS Ch. 4; 11/27/2018
- CR 2018-10512; PA-DB-18-0: Assessment of Diesel Generator Maintenance Outage Readiness; 11/28/2018
- CR 2018-10835; Plastic Piece Broken During Testing of NTS Relay 2X1 in AC101; 12/10/2018
- CR 2018-10840; Need to Update Design Drawings; 12/10/2018
- CR 2018-10845; Minor Score Indication on Fuel Block on Engine Driven Fuel Oil Pump 12/11/2018
- CR 2018-10847; Replacement Spider for Engine Driven Fuel Oil Pump P205-1 is not Correct; 12/11/2018
- CR 2018-10859; Crankcase Pressure Switch was Found in a Non-Tripped, or Reset Position; 12/11/2018
- CR 2018-10908; TS20157 Leaking Caused a Delay in Completion of EDG Outage; 12/13/2018
- CR 2018-10919; EDG 1 Ran Greater than Thirty Minutes Unloaded; 12/13/2018
- CR 2018-10934; EDG 1 Cylinder 19 Injector Linkage Found Stuck; 12/13/2018
- Procedure DB-MI-03114; Channel Functional Test/ Calibration of 59A-ISP2003 Containment Pressure Input to SFAS Channel 4; Revision 12
- Procedure DB-OP-06316; Diesel Generator Operating Procedure; Revision 60
- Procedure DB-PF-03201; Emergency Diesel Generator Fuel Oil Storage Tank Transfer Pump 1 Flow Test; Revision 7
- Procedure DB-PF-3201; Fuel Oil Transfer
- Procedure DB-SC-03076; Emergency Diesel Generator 1 184 Day Test; Revision 37
- Procedure DB-SC-03113; SFAS Channel 4 Functional Test; Revision 18
- Procedure DB-SC-04226; Emergency Diesel Generator 1 Over-Speed Trip Test; Revision 3
- Procedure DB-SC-04226; Emergency Diesel Generator 1 Over-Speed Trip Test; Revision 3
- Procedure DB-SC-04335; Emergency Diesel Generator 1 Recrank Functional Test; Revision 00
- Procedure DB-SC-04335; Emergency Diesel Generator 1 Recrank Functional Test; Revision 0
- Procedure DB-SC-3076 184 Day Fuel Sequencer Test
- Procedure DB-SC-4226; Over-Speed Trip
- Procedure DB-SC-4335; Air Start Recrank
- Procedure DB-SP-03152; AW Train 1 Level Control, Interlock, and Flow Transmitter Test; Revision 30
- Procedure NOBP-LP-2601; Human Performance Program; Revision 13
- Replacement Package 001293 9; Reverse Engineered 1 to 1 Converter for SFAS; Revision 1
- WO 200695769; HPI Train 1 Pump and Valve Test; 10/16/2018
- WO 200697454; AFW Train 1 Stroke AFW Train 1 Stroke Time FA Norm; 11/05/2018
- WO 200767893; EDG 1 184 Day Test FA Norm; 12/14/2018

71111.22—Surveillance Testing

- Procedure DB-SC-03272; Control Rod Exercising Test; Revision 6
- Procedure DB-SS-04150; Main Turbine Stop Valve Test; Revision 16
- Procedure DB-SS-04151; Main Turbine Control Test Valve; Revision 17

- Procedure DB-SS-04152; Main Turbine Combined Intermediate Valve Test; Revision 11
- WO 200692027; CRD Exercise Test; 10/13/2018
- WO 200692056; Main Turbine Stop Valves; 10/13/2018
- WO 200692057; Main Turbine Control Valve; 10/13/2018
- WO 200692058; Main Turbine CIV Test; 10/13/2018

71114.04—Emergency Action Level and Emergency Plan Changes

- DB-2017-027-00; 10 CFR 50.54(q)2 Analysis; 01/11/2018
- DB-2017-031-00; 10 CFR 50.54(q)2 Analysis; 11/12/2017
- DB-2018-002-00; 10 CFR 50.54(q)2 Analysis; 06/13/2018
- DB-2018-012-00; 10 CFR 50.54(q)2 Analysis; 05/29/2018

71124.02—Occupational As Low As Reasonably Achievable Planning and Controls

- Davis-Besse 1R20 Outage ALARA Report; Revision 1
- NOBP-CC-5704; Cobalt Reduction Program; Revision 1
- NOBP-OP-3501; Source Term Reduction Committee; Revision 5
- NOP-OP-4011; On-Line Radiological Goal Setting; Revision 0
- Radiation Work Permit and Associated ALARA File; Radiation Work Permit 2018-5104; Reactor Head Disassembly / Reassembly Work Activities
- Radiation Work Permit and Associated ALARA File; Radiation Work Permit 2018-5015; Scaffold Work Activities in Containment
- Radiation Work Permit and Associated ALARA File; Radiation Work Permit 2018-5019; In Service Inspection (ISI) Work Activities in Containment
- Radiation Work Permit and Associated ALARA File; Radiation Work Permit 2018-5050; HP80 Repair Activities
- Report RSI - 4716; Davis-Besse Nuclear Power Station Unit - 1 Primary Piping Radiation Level Assessment during Refuel Outage 20 (RO20); Radiological Solutions, Inc.; April 2018

71151—Performance Indicator Verification

- NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 7
- NOBP-LP-4012-52; Reactor Coolant System Specific Activity; April 2017 through September 2018
- NOBP-LP-4012-57; Occupational Exposure Control Effectiveness; ; April 2017 through September 2018
- NOBP-LP-4012-58; RETS/ODCM Radiological Effluent Occurrence; October 2017 through September 2018
- Procedure NOBP-LP-4012-53; Reactor Coolant System Leakage; Revision 00

71152—Problem Identification and Resolution

- 10 CFR 50.59 Screen 18-00648; EC 18-0037: Shield Building Shoulders 9 and 10 Laminar Cracking Remediation; Revision 0
- 10 CFR 50.59 Screen 18-02341; Revision to Procedure EN-DP-01511 (R09); Revision 0
- 18-0037-002-FCR-A; Field Change Request: Change to EC 18-0037-002 Revision 1; 08/21/2018
- 18-0037-002-FCR-B; Field Change Request: Change to EC 18-0037-002 Revision 1; 09/19/2018

- 18-0037-002-FCR-C; Field Change Request: Change to EC 18-0037-002 Revision 1; 10/10/2018
- 181228-0011; Bowser Morner Report: Concrete Compressive Strength Test; 11/11/2018
- 181228-0012; Bowser Morner Report: Concrete Compressive Strength Test; 11/17/2018
- 181228-0013; Bowser Morner Report: Concrete Compressive Strength Test; 12/09/2018
- Bowser Morner Report 181228-0011; Report of Concrete Compressive Strength Test; 11/11/2018
- Bowser Morner Report 181228-0012; Report of Concrete Compressive Strength Test; 11/17/2018
- Bowser Morner Report 181228-0013; Report of Concrete Compressive Strength Test; 12/09/2018
- C-301Q; Technical Specification for Operational Phase for Purchase of Ready Mixed Concrete; Revision 3
- C-301Q-03-01; Specification Change Notice - Technical Specification C-301Q Revision 3; 08/22/2017
- C-301Q-03-03; Specification Change Notice - Technical Specification C-301Q Revision 3; 08/21/2018
- C-301Q-03-04; Specification Change Notice - Technical Specification C-301Q Revision 3; 10/04/2018
- C-CSS-099.20-074; Calculation: Shield Building Evaluation of Interim Condition with Partial and Limited Concrete Removal in Specific Areas of Shoulders 9 and 10; Revision 1
- C-CSS-099.30-074; Calculation: Shield Building Evaluation of Interim Condition with Partial and Limited Concrete Removal in Specific Areas of Shoulders 9 and 10; Revision 1
- Change Notice 18-105; UFSAR Section 18.1.43: Shield Building Monitoring Program; 09/06/2018
- Commitment DB-L-10-221-LRAA.1-46; Comment Change Tracking Item: Shield Building Monitoring Program; 08/24/2018
- CR 2018-00201; Concrete Not Sampled in Accordance with ASTM C172 Requirements; 01/09/2018
- CR 2018-06678; Shield Building Bore S5-666.0-10 Findings; 07/26/2018
- CR 2018-06679; Shield Building Bore S7-666.0-9 Findings; 07/26/2018
- CR 2018-06680; Shield Building Bore S10-666.0-38 Findings; 07/26/2018
- CR 2018-06694; Shield Building Bore S4-650.0-11 Findings; 07/26/2018
- CR 2018-06695; Shield Building Bore S9-666.0-11 Findings; 07/26/2018
- CR 2018-06696; Shield Building Bore S3-650.0-11 Findings; 07/26/2018
- CR 2018-06697; Shield Building Bore S7-666.0-7 Findings; 07/26/2018
- CR 2018-06781; Shield Building Bore S15-674.5-3 Findings; 07/30/2018
- CR 2018-08340; Foreign Material Introduced into Spent Fuel Pool; 09/21/2018
- CR 2018-08424; Unapproved Chemical Consumable Introduced into the Spent Fuel Pool; 09/24/2018
- CR 2018-10511; Shield Building Shoulder 10 Honeycombing; 11/28/2018
- DB-MS-09010; Maintenance Services Procedure: Concrete Placement Procedure; Revision 5
- EC 18-0037-002; Design Change Package: Shield Building Shoulder 10 Removal; Revision 1
- EN-DP-01511; Administrative Procedure: Structures Monitoring; Revision 9
- Notification Number 601178158; Vendor Technical Information: Resistivity Measurements of Mix No. 1184871; 07/20/2018
- Notification Number 601178733; Vendor Technical Information: Summary of Laboratory and Field Concrete Batching; 07/25/2018
- Notification Number 601181130; Vendor Technical Information: Slag Cement Information; 08/16/2018

- Notification Number 601181168; Vendor Technical Information: Crack Evaluation Summary and Impulse Response (IR) Test Data, Shield Building Wall 2018 Inspection Campaign; 08/16/2018
- Notification Number 601187801; Vendor Technical Information: Batch Plant Concrete Trials and Mix Design Submittal - Mix ID 1154645; 09/18/2018
- Notification Number 601190411; Vendor Technical Information: Review of Current Specifications Regarding Concrete for Proposed Shoulder Repair; 10/09/2018
- Notification Number 601194437; Vendor Technical Information: Winter Concrete Production and Protection - Mix ID 115645; 11/05/2018
- PDUN 601178859-003; Partial Drawing Update Notice: C-111B Sheet 1, Revision 4; 08/21/2018
- Procedure NOP-OP-3001; Chemical Control Program; Revision 26
- TOL003-18-06-90028-1; Element Materials Technology Test Report: Rebar Test Splices; 06/28/2018
- TOL003-18-06-90028-2; Element Materials Technology Test Report: Rebar Test Splices; 06/28/2018
- TOL003-18-07-91589-1; Element Materials Technology Test Report: Rebar Test Splices; 07/30/2018
- WO 200686362; Boroscope Examination and Impulse Response Data: Core S3-650.0-11; 07/29/2018
- WO 200686362; Boroscope Examination and Impulse Response Data: Core S9-666.0-12; 07/27/2018
- 10 CFR 50.59 Screen 18-00648; EC 18-0037: Shield Building Shoulders 9 and 10 Laminar Cracking Remediation; Revision 0
- 18-0037-002-FCR-A; Field Change Request: Change to EC 18-0037-002 Revision 1; 08/21/2018
- 18-0037-002-FCR-B; Field Change Request: Change to EC 18-0037-002 Revision 1; 09/19/2018
- 18-0037-002-FCR-C; Field Change Request: Change to EC 18-0037-002 Revision 1; 10/10/2018
- C-CSS-099.20-074; Calculation: Shield Building Evaluation of Interim Condition with Partial and Limited Concrete Removal in Specific Areas of Shoulders 9 and 10; Revision 1
- CR-2018-10511; Shield Building Shoulder 10 Honeycombing; 11/28/2018
- EC 18-0037-002; Design Change Package: Shield Building Shoulder 10 Removal; Revision 1

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

- CR 2014-12491; Licensed Operator Failed to Report Change in Medication; 08/01/2014
- CR 2014-13304; Licensed Operator Did Not Notify of Change in Medical Condition; 08/20/2014
- CR 2014-13305; Licensed Operator Did Not Comply with License Requirements; 08/20/2014
- CR 2018-10618; 10 CFR 50.9 Training Not Established as Continuing in Response to NRC Confirmatory Order EA-16-022; 12/03/2018
- DB-EA-16-022-01; Request to Close Commitment Tracking Item; 11/30/2016
- DB-EA-16-022-02; Request to Close Commitment Tracking Item; 11/30/2016
- DB-EA-16-022-03; Request to Close Commitment Tracking Item; 12/30/2016
- DB-EA-16-022-04; Request to Close Commitment Tracking Item; 12/14/2017
- DB-EA-16-022-05; Request to Close Commitment Tracking Item; 09/27/2018
- DB-EA-16-022-06; Request to Close Commitment Tracking Item; 12/14/2016

- DB-EA-16-022-07; Request to Close Commitment Tracking Item; 09/07/2016
- DB-EA-16-022-08; Request to Close Commitment Tracking Item; 12/29/2016
- DB-EA-16-022-09; Request to Close Commitment Tracking Item; 03/01/2017
- L-16-347; Letter from Brian D. Boles, Vice President, Nuclear to Kenneth O'Brien, Director, Division of Reactor Safety, Action for Confirmatory Order EA-16-022; 12/01/2016
- L-17-060; Letter from Brian D. Boles, Vice President, Nuclear to Kenneth O'Brien, Director, Division of Reactor Safety, Notification of Completion of Actions for Confirmatory Order EA-16-022; 03/01/2017
- L-18-246; Letter from Mark B. Bezilla, Site Vice President, to Kenneth O'Brien, Director, Division of Reactor Safety, Notification of Completion of Actions for Confirmatory Order EA-16-022; 12/26/2018
- G-OTLC-201605OER_BV3; Operating Experience Review, Revision 0
- G-OTLC-201605OER_BV3 Course Completion Roster; 12/17/2018
- Davis-Besse Apparent Violation of 10 CFR 50.9 PowerPoint Presentation; 08/04/2016
- FENOC Training Attendance and Completion Rosters, Various.
- Email Correspondence Between G. Wolf and J. Sharpless, 02/08/2017 Through 02/22/2017