



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

November 10, 2022

Mr. Terry Brown  
Site Vice President  
Energy Harbor Nuclear Corp.  
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 – INTEGRATED INSPECTION  
REPORT 05000346/2022003**

Dear Terry Brown:

On September 30, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Davis-Besse Nuclear Power Station. On October 25, 2022, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

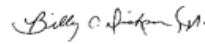
One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement; and the NRC Resident Inspector at Davis-Besse Nuclear Power Station.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; and the NRC Resident Inspector at Davis-Besse Nuclear Power Station.

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

Sincerely,



Signed by Dickson, Billy  
on 11/10/22

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

Docket No. 05000346  
License No. NPF-3

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV

Letter to Terry Brown from Billy Dickson dated November 10, 2022.

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION – INTEGRATED INSPECTION REPORT 05000346/2022003

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

Docket Number: 05000346

License Number: NPF-3

Report Number: 05000346/2022003

Enterprise Identifier: I-2022-003-0043

Licensee: Energy Harbor Nuclear Corp.

Facility: Davis-Besse Nuclear Power Station

Location: Oak Harbor, OH

Inspection Dates: July 01, 2022 to September 30, 2022

Inspectors: R. Cassara, Resident Inspector  
J. Cassidy, Senior Health Physicist  
D. Mills, Senior Resident Inspector  
J. Reed, Health Physicist

Approved By: Billy C. Dickson, Jr., Chief  
Reactor Projects Branch 2  
Division of Operating Reactor Safety

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee’s performance by conducting an integrated inspection at Davis-Besse Nuclear Power Station, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC’s program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### List of Findings and Violations

Failure to Develop Appropriate Local Leak Rate Testing for Fuel Transfer Tubes			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000346/2022003-01 Open/Closed	[H.6] - Design Margins	71152S
<p>The inspectors identified a Green finding and associated non-cited violation of Title 10 of the <i>Code of Federal Regulations</i> (10 CFR) Part 50, Appendix B, Criterion XI, “Test Control.” Specifically, the licensee did not establish testing requirements and acceptance limits to provide reasonable assurance of containment integrity by detecting fuel transfer tube flange seal degradation as required by 10 CFR Part 50, Appendix B, Criterion XI. Failure to detect degradation of the fuel transfer tube flange seals could result in a loss of containment integrity. The licensee entered this issue into their corrective action program as condition reports 2022-03195.</p>			

### Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000346/2021-002-00	LER 2021-002-00 for Davis-Besse Nuclear Power Station, Unit 1, Failure of Auxiliary Feedwater Rooms Interconnecting Door to Latch due to Worn Interlock	71153	Closed
LER	05000346/2021-003-00	LER 2021-003-00 for Davis-Besse Nuclear Power Station, Unit 1, Reactor Trip due to Failed Uninterruptible Power Supply and Steam Feedwater Rupture Control System Actuations	71153	Closed

## **PLANT STATUS**

The unit operated at or near rated thermal power for the entire inspection period.

## **INSPECTION SCOPES**

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

#### Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the adequacy of the overall preparations to protect risk-significant systems from impending weather of forecasted severe thunderstorms and high winds during the week ending July 23, 2022

### 71111.04 - Equipment Alignment

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

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

- (1) Component cooling water (CCW) train 2 following pump maintenance during the week ending August 13, 2022
- (2) Spent fuel pool cooling system during the week ending August 27, 2022
- (3) Auxiliary feedwater train 1 while auxiliary feedwater train 2 out of service for scheduled maintenance during the week ending August 27, 2022
- (4) Motor driven feed pump while emergency feedwater out of service for scheduled maintenance during the week ending September 24, 2022

### 71111.05 - Fire Protection

#### Fire Area Walkdown and Inspection Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Security data management system locations for the CAS/SAS (Central Alarm Station/Secondary Alarm Station) and security computer rooms during the week ending July 9, 2022
- (2) Number 4 mechanical penetration room, rooms 115CC, 314 and 314CC, and fire area A, during water curtain outage the week ending August 13, 2022
- (3) Emergency feedwater facility during the week ending September 10, 2022
- (4) Auxiliary feed pump 1 and 2 rooms, room 237 and 238, fire area E and F during the week ending August 27, 2022
- (5) Cable spreading room, room 422A, fire area DD during the week ending September 3, 2022

#### 71111.06 - Flood Protection Measures

##### Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) High water in manholes 3009 and 3010, and inspection of manholes 3040, 3045, 3046, and 3005

#### 71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

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

- (1) The inspectors observed and evaluated requalification simulator during drill on August 30, 2022

#### 71111.12 - Maintenance Effectiveness

##### Maintenance Effectiveness (IP Section 03.01) (2 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) Control rod drive absolute position indicating power supply replacement after failure
- (2) Integrated control system feedwater module replacement and calibration

#### 71111.13 - Maintenance Risk Assessments and Emergent Work Control

##### Risk Assessment and Management Sample (IP Section 03.01) (3 Samples)

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

- (1) Integrated control system feedwater module calibration causing delta cold leg temperature difference during the week ending August 27, 2022
- (2) Risk management during scheduled emergency feedwater outage during the week ending September 24, 2022

- (3) Containment entry at power to inspect for reactor coolant system leakage during the week ending September 17, 2022

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (1 Sample)

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

- (1) Anticipatory reactor trip system channel 4 due to unexpected trip of control rod drive breaker C after opening the cabinet door during the week ending August 6, 2022

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

- (1) CCW pump 2 rotor and seal package replacement during the week ending August 6, 2022

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (8 Samples)

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

- (1) Makeup pump 2 maintenance and PMT during the week ending July 30, 2022
- (2) CCW pump 2 after rotor and seal package replacement during the week ending August 6, 2022
- (3) Motor driven feed pump after scheduled maintenance during the week ending August 6, 2022
- (4) Safety features actuation signal channel integrated testing following scheduled component replacement during the week ending August 20, 2022
- (5) Auxiliary feedwater pump 2 quarterly test after scheduled maintenance during the week ending August 27, 2022
- (6) High pressure injection pump 1 after flow transmitter calibration during the week ending September 17, 2022
- (7) Emergency feedwater pump quarterly after planned maintenance during the week ending September 24, 2022
- (8) Near full-power testing of turbine stop and control valves following installation of p-port orifices during the week ending September 24, 2022

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance testing activities to verify system operability and/or functionality:



Surveillance Tests (other) (IP Section 03.01) (1 Sample)

- (1) Low pressure injection pump 1 quarterly during the week ending July 23, 2022

Containment Isolation Valve Testing (IP Section 03.01) (1 Sample)

- (1) Personnel hatch local leak rate testing during the week ending September 17, 2022

71114.06 - Drill Evaluation

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

- (1) Integrated drill on August 30, 2022

**RADIATION SAFETY**

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Walkdowns and Observations (IP Section 03.01) (4 Samples)

The inspectors evaluated the following radioactive effluent systems during walkdowns:

- (1) Station vent system
- (2) Borated water storage tank
- (3) North basin
- (4) Training center pond to Toussaint River

Sampling and Analysis (IP Section 03.02) (2 Samples)

Inspectors evaluated the following effluent samples, sampling processes and compensatory samples:

- (1) Borated water storage tank – weekly gamma emitter
- (2) Training center pond to Toussaint River – compensatory action

Dose Calculations (IP Section 03.03) (2 Samples)

The inspectors evaluated the following dose calculations:

- (1) Containment purge pre-release permit – 22-B0003G
- (2) Liquid discharge pre-release permit – 21-B0008L

**OTHER ACTIVITIES – BASELINE**

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 02.01) (1 Sample)

(1) January 1, 2021 through June 30, 2022

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 02.02) (1 Sample)

(1) January 1, 2021 through June 30, 2022

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 02.03) (1 Sample)

(1) January 1, 2021 through June 30, 2022

BI01: Reactor Coolant System (RCS) Specific Activity Sample (IP Section 02.10) (1 Sample)

(1) July 1, 2021 through June 30, 2022

BI02: RCS Leak Rate Sample (IP Section 02.11) (1 Sample)

(1) October 1, 2021 through September 30, 2022

OR01: Occupational Exposure Control Effectiveness Sample (IP Section 02.15) (1 Sample)

(1) July 1, 2021 through June 30, 2022

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual  
Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences Sample  
(IP Section 02.16) (1 Sample)

(1) July 1, 2021 through June 30, 2022

71152A - Annual Follow-up Problem Identification and Resolution

Annual Follow-up of Selected Issues (Section 03.03) (1 Sample)

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

- (1) Condition report 2022-00382, "Door 300 Damaged During Fuel Delivery." In January 2022, during new fuel delivery, a truck impacted the fuel handling building train bay door (door 300) and damaged the door frame. The inspectors reviewed the circumstances leading to this incident and licensee corrective actions, including repairs. The inspectors also reviewed licensee analyses related to fuel handling building and fuel handling weather enclosure air leakage. No deficiencies were identified.

71152S - Semiannual Trend Problem Identification and Resolution

Semiannual Trend Review (Section 03.02) (1 Sample)

## Transfer tube flange leaks following acceptable local leak rate tests

- (1) The inspectors reviewed the licensee's corrective action program for potential adverse trends related to transfer tube flange leaks that might be indicative of a more significant safety issue. The plant has two fuel transfer tubes connecting the spent fuel pool with the refueling canal in containment. The transfer tubes are isolated from containment using gate valves and bolted blind flanges. The bolted blind flanges are sealed to the pipe flanges using two concentric rubber O-rings. In 2018, the licensee implemented an engineering change that reduced the number of flange bolts from 28 to 14. This reduction of bolts was supported by an engineering evaluation. Since this change, the licensee has experienced multiple issues related to the positive sealing of the east and west transfer tubes.
  - In 2020, following shutdown for refueling outage, a walkdown of the containment revealed a significant amount of wet and dry boric acid in the refueling canal. This boric acid was traced to a leak of approximately 60 drops per minute from the west transfer tube flange. Condition report 2020-01652
  - In 2022, during a walkdown of containment prior to startup a leak of more than 1 gallon per minute was found coming from the east transfer tube flange. The flange bolts were found to be only slightly more than hand-tight.

Inspectors identified a Green non-cited violation and a minor violation of NRC regulations related to these issues.

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

#### Event Report (IP Section 03.02) (2 Samples)

The inspectors evaluated Davis-Besse licensee event reports (LERs) 05000346/202100300, "Reactor Trip due to Failed Uninterruptible Power Supply and Steam Feedwater Rupture Control System Actuations," and 05000346/2021002 "Failure of Auxiliary Feedwater Rooms Interconnecting Door to Latch due to Worn Interlock."

- (1) LER 05000346/2021002, "Failure of Auxiliary Feedwater Rooms Interconnecting Door to Latch due to Worn Interlock," (ADAMS Accession No. ML21235A413). The inspectors determined that it was not reasonable to foresee or correct the cause discussed in the LER therefore no performance deficiency was identified. The inspectors did not identify a violation of NRC requirements. This LER is closed.
- (2) LER 05000346/2021003, "Reactor Trip due to Failed Uninterruptible Power Supply and Steam Feedwater Rupture Control System Actuations," (ADAMS Accession No. ML21250A131). The inspection conclusions associated with this LER are documented in Inspection Report 05000346/2021050. This LER is closed.

## INSPECTION RESULTS

Failure to Develop Appropriate Local Leak Rate Testing for Fuel Transfer Tubes			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000346/2022003-01 Open/Closed	[H.6] - Design Margins	71152S
<p>The inspectors identified a Green finding and associated non-cited violation of Title 10 of the <i>Code of Federal Regulations</i> (10 CFR) Part 50, Appendix B, Criterion XI, "Test Control." Specifically, the licensee did not establish testing requirements and acceptance limits to provide reasonable assurance of containment integrity by detecting fuel transfer tube flange seal degradation as required by 10 CFR Part 50, Appendix B, Criterion XI. Failure to detect degradation of the fuel transfer tube flange seals could result in a loss of containment integrity. The licensee entered this issue into their corrective action program as condition reports 2022-03195.</p>			
<p><u>Description:</u></p> <p>In 2018, the licensee performed a local leak rate test on the east and west fuel transfer tube blind flanges. Both fuel transfer tubes satisfactorily passed these local leak rate tests. In 2020, the licensee determined that the west transfer tube flange was leaking and had leaked for a significant amount of time. In 2022, during containment walkdowns before reactor startup, the licensee found the east transfer tube flange leaking at the flange. The east and west flanges had previously passed local leak rate testing (LLRT). The licensee determined the bolts holding the flanges in place to be only hand-tight, and upon disassembly, the licensee found the LLRT test port filled with grease. With grease blocking the test point port, the results of the LLRTs conducted gave invalid results.</p> <p>Based on a review of licensee procedures for assembling the transfer tube seals and for performing local leak rate testing, the inspectors determined that the LLRT procedure is unsuitable for detecting transfer tube sealing with excess grease on the O-rings as is current licensee practice.</p> <p>Corrective Actions: The licensee revised the transfer tube flange assembly procedure, reperformed the local leak rate test, and performed an extent of condition considering the west transfer tube.</p> <p>Corrective Action References: CR 2020-01652, CR 2022-03169, CR 2022-03195, CR 2022-07735</p>			
<p><u>Performance Assessment:</u></p> <p>Performance Deficiency: In 2020, at the beginning of a refueling outage, it was discovered that the west transfer tube flange leaked. In 2022, prior to startup, it was discovered that the west transfer tube leaked. In both cases the leaks developed following successful local leak rate tests. The licensee's failure to adequately test the flange seals to provide reasonable assurance that they were reasonably leak tight is a performance deficiency.</p> <p>Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the structures, systems, and component (SSC) and Barrier Performance attribute of the Barrier Integrity cornerstone and adversely affected the</p>			

cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, the failure of the LLRT as currently performed with seals coated in grease may result in a failure to detect an improperly sealed transfer tube flange.

Significance: The inspectors assessed the significance of the finding using Inspection Manual Chapter (IMC) 0609 Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Inspectors referenced IMC 0609 Appendix A, Exhibit 3 – "Barrier Integrity Screening" Question C.1 which refers the user to IMC 0609, Appendix H, because the flange leaks represented an actual open pathway in the physical integrity of reactor containment. Inspectors referenced IMC 0609 Appendix H, Table 7.2 "Phase 2 Risk Significance – Type B Findings at Power" for large dry containments, which resulted in the finding screening to Green because there was no actual leakage from containment to environment and the volume of leakage under postulated accident conditions would have been much less than 100 percent of containment volume per day.

Cross-Cutting Aspect: H.6 – Design Margins: The organization operates and maintains equipment within design margins. Margins are carefully guarded and changed only through a systematic and rigorous process. Special attention is placed on maintaining fission product barriers, defense-in-depth, and safety related equipment. Specifically, the flange leaks discovered in 2020 and 2022 coupled with the discovery of the local leak rate test port packed with grease should have resulted in a more robust organizational response and recognition of a potentially deficient local leak rate test.

Enforcement:

Violation: 10 CFR 50 Appendix B Criterion XI "Test Control," requires, in part, "A test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents." Contrary to the above, the licensee failed to develop a testing program for the fuel transfer tube flange seals to ensure they remained capable of performing their functions satisfactorily in service.

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

Minor Violation	71152S
<p>Minor Violation: In 2018, the licensee implemented a design change to reduce the number of transfer tube blind flange bolts from 28 to 14 per tube. The licensee performed an engineering analysis but failed to consider all factors. Specifically, the licensee failed to analyze the adequacy of the reduced bolting for the maximum allowed planar warpage/misalignment of the tube flange and blind flange. The design drawing states, "check seal surface of the tube flange for flatness (a) At 45-degree intervals (8 places); (b) To be within 0.015" which was specified for the original design using 28 flange bolts. The licensee failed to validate that this specification is adequate to ensure proper sealing with the use of 14 flange bolts. Since the licensee made this change, the licensee has, on multiple occasions, detected fuel transfer tube leakage following reassembly.</p>	

Screening: The inspectors determined the performance deficiency was minor. The licensee's failure to perform a thorough engineering review constituted a minor performance deficiency.

Enforcement: Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that, "measures shall be established to assure that applicable regulatory requirements and the design basis ... are correctly translated into specifications, drawings, procedures and instructions." Contrary to the above requirement, the licensee failed to evaluate and/or document that the design specification for the seal flange was adequate to ensure proper sealing with reduced bolting.

This failure to comply with 10 CFR 50 Appendix B, Criteria III constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

## **EXIT MEETINGS AND DEBRIEFS**

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

- On October 25, 2022, the inspectors presented the integrated inspection results to Mr. T. Brown, Site Vice President, and other members of the licensee staff.
- On August 26, 2022, the inspectors presented the radiation protection inspection results to Mr. T. Brown, Site Vice President, and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04	Corrective Action Documents	2021-04816	Handwheel Nut and Handwheel Fell Off of Valve FW126	06/21/2021
		2022-06530	BACC on SF16268	08/24/2022
	Procedures	DB-OP-06021	Spent Fuel Pool Operating Procedure	40
		DB-OP-06233	Auxiliary Feedwater System	45
		DB-OP-06262	Component Cooling Water System Procedure	46
DB-SS-03090	Motor Driven Feed Pump Monthly Valve Verification	11		
71111.05	Corrective Action Documents	2022-05878	Fire Piping Flange Leak in Cable Spread Room Near West Wall	07/29/2022
	Fire Plans	PFP-AB-237	Auxiliary Feed Pump 1 Room 237	05
		PFP-AB-238	Auxiliary Feed Pump 2 Room 238, Fire Area F	05
		PFP-AB-314	No 4 Mechanical Penetration Rooms 115CC, 314, and 314CC, Fire Area A	09
		PFP-AB-422A	Cable Spreading Room 422A, Fire Area DD	04
PFP-AB-422A	Cable Spreading Room, Room 422A, Fire Area DD	04		
71111.06	Corrective Action Documents	2022-05891	High Water in Manhole MH3009	07/29/2022
		2022-05892	High Water in Manhole MH3010	07/29/2022
		2022-06114	Paved Area East of the Plant is Underwater	08/09/2022
	Miscellaneous		Emergency Preparedness Integrated Drill	08/30/2022
		Visual Exam of Equipment and Components (VT-3)	DB-SUB49-01 Emergency Sump, Borated Water Storage Tank	09/13/2022
Work Orders	200832523	Check Manhole Water Levels in MH3040, MH3044, MH3045, and MH3048	09/28/2020	
71111.07A	Corrective Action Documents	2019-05879	CCW Heat Exchanger 3 Outage at Risk	07/11/2019
		2020-03251	E22-2, CCW 2 Heat Exchanger, Endbell Leak	04/15/2020
		2022-04541	CCW HX 3 Eddy Current Test Results	06/01/2022
	Corrective Action Documents Resulting from Inspection	2020-07564	NRC Identified: Error in EER 600724048, CCW HX Tube Evaluation	09/29/2020
71111.11Q	Miscellaneous		Emergency Preparedness Integrated Drill	08/30/2022

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.12	Corrective Action Documents	2019-10760	Q233, CRD 5 VDC Power Supply 'B' Fault, Indicates NTNM	09/11/2016
		2020-02452	The CRD API Power Supply 'B' in C4801X Did Not Turn on When the DCRDCS Was Energized	03/20/2020
		2022-00893	MFP 1 Did Not Transfer from ICS to MDT-20 Control	02/06/2022
		2022-01894	System Monitoring Identified Anomalies with Rod 2-1 Absolute Position Indication	03/09/2022
		2022-02312	Set Screw Missing From HIC-ICS20	03/17/2022
		2022-03271-1	Maintenance Rule Review ICS/NNI System	04/29/2022
		2022-03275	Plant Computer Lost OPC Connection to ICS-ULD	04/14/2022
		2022-03441	Main Feed Pump 1 ICS Controller HICICS36B Will Not Transfer from Manual to Auto	04/19/2022
		2022-04263	Received Unexpected Annunciator Alarm 14-2-F ICS ULD Trouble	05/20/2022
		2022-05606	CRD Absolute Position Indicator 5-Vold Power Supply 'B' Failed High	07/18/2022
		2022-06464	Secondary HBP Unexpectedly Non-Functional During Testing	08/22/2022
		2022-06474	T983 Feedwater Temperature Incorrectly Feeding Through to FDMIS	08/23/2022
		2022-06499	String Check Found Out of Tolerance	08/23/2022
		2022-06500	Temperature Sensitivity for FYSP02A1 (X) Calibration	08/23/2022
		2022-06734	Unit Load Demand Transferred to Manual on Feedwater Flow Deviation	09/01/2022
	Miscellaneous	NOBP-LP-2601-03	Pre-Job Brief	0
	Procedures	DB-OP-06401	Transferring Rod Control Panel	32
	Work Orders	200889122	DB-SUB055-01 SUB055-01 CRD System Power Supply B Fault	07/18/2022
71111.13	Corrective Action Documents	2022-06909	Unexpected Change in Delta T Cold During Adjustments	09/10/2022
		2022-06935	Boric Acid Identified During Containment Walkdown	09/12/2022
		2022-07181	Diesel Oil Leak coming from EFW Day Tank	09/22/2022
		2022-07345	Containment Entry, Higher Dose Rates than Expected in Not Normally Accessed Area	09/29/2022
		2022-07349	Untimely Documentation of a Condition Report	09/29/2022



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Procedures	DBBP-OPS-0003	On-Line Risk Management Process	17
		DBBP-OPS-0011	Protected Equipment Posting	16
		NG-DB-00001	On-Line Risk Management	18
		NOP-OP-1007	Risk Management	36
	Work Orders	200724732	PM 12055 EFW Diesel, Gear and Pump Drain/Fill T-89	09/19/2019
		200820648	PM 12055 EFW Diesel, Gear and Pump	09/12/2022
71111.15	Corrective Action Documents	2022-05932	ARTS Channel 4 Trip During Testing	08/01/2022
	Work Orders	200829575	Train 2 Staggered Test, Breaker C	08/02/2022
		200842248	Channel Functional Test of SFRCS Actuation Channel 2 Logic for Mode 1	08/01/2022
71111.18	Corrective Action Documents	2020-01257	CCW Pump 1 Lessons Learned	02/18/2020
		2022-05826	Potential Leakage Identified from Degraded Hose	07/27/2022
		2022-07345	Containment Entry, Higher Dose Rates Than Expected in Not Normally Accessed Area	09/29/2022
	Engineering Changes	22-1032-001	Temporary Modification to Replace a Braided Hose with SS Tubing on RE4598BA	0
		22-1032-002	Temporary Modification to Replace a Braided Hose with SS Tubing on RE4598BA, Restoration	0
	Procedures	NOP-CC-2003	Engineering Changes	27
	Work Orders	200763445	Add Constant Level Oilers to CCW Pump 2 Inboard and Outboard Bearing	08/23/2018
		200765344	Replace CCW Pump 2 Inboard and Outboard Slinger Rings with 8.5" ID Slinger Rings	07/26/2022
		200889938	CCW Pump 2 Baseline Test	08/05/2022
	71111.19	Corrective Action Documents	2021-01355	Main Turbine Stop Valve 4 Closed While Testing Main Turbine Stop Valve 2
2021-04152			Turbine Stop Valve 2 Testing Issues	05/22/2021
2022-03993			Elevated Vibration Readings on MDFP	05/11/2022
2022-06031			Motor Driven Feedwater Pump P241 High Vibration Level	08/05/2022
2022-06049			Engineering Review DB-PF-03573 CCW Pump 2 Baseline Data	08/05/2022
2022-06060			CCW Pump 2 Outboard Oil Discoloration	08/06/2022

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
		2022-06066	CCW Pump 2 Abnormal Noise	08/06/2022	
		2022-06070	High Pressure Injection Pumps Recirculation Line Drain Valve HP157A Handwheel is Loose	08/07/2022	
		2022-06950	BACC: Water Drop Formed on Bottom of HPI Pump 1 Casing Flange	09/12/2022	
	Miscellaneous	SD-038	System Description for High Pressure Injection System for Energy Harbor Nuclear Davis Besse Nuclear Power Station Unit 1	07	
	Procedures	DB-SS-04201	Emergency Feedwater Pump Quarterly Test	08	
	Work Orders	200627177	PM 5190 BF1201 Test MCC Breakers	08/25/2022	
		200724732	PM 12055 EFW Diesel, Gear and Pump Drain/Fill T-89	09/19/2019	
		200804014	Makeup Pump 1-2 PM 0171	07/27/2022	
		200820648	PM 12055 EFW Diesel, Gear and Pump	09/12/2022	
		200821069	Repair Oil Leak on the Pump Inboard Bearing Cap	07/05/2022	
		200822815	PM 2522 Lubricate MDFP Motor MP241	08/04/2022	
		200825460	CRD Exercise Test	09/12/2022	
		200829614	Motor Driven Feed Pump Quarterly Test	08/03/2022	
		200831602	PM 1702K3-2 Lube/Check TTV	08/22/2022	
		200831943	P3218-001 05.001 BW26 Forward Flow BW26 Forward Flow FA Norm	09/12/2022	
		200847339	Installation of P-Port Orifices on All Fast-Acting Solenoid Valves for All Main Stop, Control, Intercept, and Intermediate Stop Valves	04/20/2021	
		200859897	Install P-Port Orifice in the FASVs for Turbine Generator Control Valves and Reheat Stop Valves	08/06/2021	
		200889938	CCW Pump 2 Baseline Test	08/05/2022	
	71111.22	Procedures	DB-OP-03291	Containment Personnel and Emergency Airlocks Seal Leakage Test	14
			DB-OP-06012	Decay Heat and Low Pressure Injection System Operation Procedure	84
DB-PF-03291			Containment Personnel and Emergency airlocks Seal Leakage Test	14	
DB-SP-03446			Decay Heat Train 1 Pump and Valve Test (Mode 1-3)	12	
71114.06	Corrective Action	2022-06710	EP Drill: Trend Identified in Lack of Overall Knowledge of	08/31/2022	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents		Security Events or Threats Procedures	
		2022-06726	EP Drill: August 30, 2022, Integrated Drill Objectives Not Met	09/01/2022
71124.06	Corrective Action Documents	2022-06404	Storm Sewer RE 4686 Indication Flashing	08/19/2022
	Corrective Action Documents Resulting from Inspection	2022-0658	Lack of Clarity in DB-CN-12005 Could Result in Required Compensatory Sampling Interval Being Exceeded	08/24/2022
	Miscellaneous		Offsite Dose Calculation Manual	38
			Offsite Dose Calculation Manual	39
		21-B0008L	Liquid Batch Release Package	03/08/2021
		22-B0003G	Containment Purge Release Package	03/03/2022
		L-21-107	Combined Annual Radiological Environmental Operating Report and Radiological Effluent Release Report for the Davis-Besse Nuclear Power Station – 2020	05/15/2021
		L-22-092	Annual Radiological Environmental Operating Report, including the Radiological Effluent Release Report for the Davis-Besse Nuclear Power Station – 2021	05/16/2022
	Procedures	DB-CH-04005	Weekly Condenser Air Activity Sampling and Analysis	22
		DB-CN-03008	Station Vent Release, Weekly Radiological Monitoring, Sampling, and Analysis of RE4598AA	18
		DB-CN-03013	Liquid Releases, Quarterly Monitoring Analysis	10
		DB-CN-04039	North Settling Basin Weekly Sampling and Analysis	05
		DB-CN-04040	North Settling Basin Quarterly Analysis	09
		DB-CN-12005	Storm Sewer Monitor (RE4686) Inoperable / In Alarm	06
		DB-OP-03011	Radioactive Liquid Batch Release	30
		DB-OP-03012	Radioactive Gaseous Batch Release	29
71151	Miscellaneous		2021 DOSE_ST.xlsx	Various
			2022 DOSE_ST.xlsx	Various
			Cycle 22 DEI.xlsx	Various
			Cycle 23 DEI.xlsx	Various
	Procedures	NOBP-LP-4012	Industry Reporting and Information System (IRIS)	08
71152A	Corrective Action	2022-00382	Door 300 Damaged During Fuel Delivery	01/18/2022

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents			
71152S	Calculations	32-9279098-000	Davis-Besse Fuel Transfer Tube Cover Plate Bolt Reduction [Proprietary]	01/24/2018
	Corrective Action Documents	2008-32482	Fuel Transfer Tube Blank Flanges Improperly Sealed	01/02/2008
		2008-33846	DB-PA-08-01: DB-MM-09186 Procedural Quality/Compliance Issues	01/19/2008
		2008-34027	DB-PA-08-01: Transfer Tube Blank Flanges Were Installed with 2 O-Rings	01/02/2008
		2008-34209	Rework Fuel Transfer Tube Blank Flanges	01/23/2008
		2009-67480	2009 CDBI: Inadequate Equivalency Justification Provided in ERR 60-0003-070	11/09/2009
		2020-01652	1R21 BACC: Boric Acid Crystals and Oil Underneath West Fuel Transfer Tube Flange	03/01/2020
		2020-01655	ESM: Oil Under Fuel Transfer Tube in Refueling Canal	03/01/2020
		2020-01664	1R21 BACC: Fuel Transfer Tube 1-2 Flange	03/02/2020
		2022-03169	1R22 BACC: Active Leak in Refueling Canal/ Deep End	04/11/2022
	2022-03195	As Found Condition of the East Transfer Tube Flange	04/12/2022	
	Drawings	M-519-00050	Drawing/Diagram	8, 15, 17, 18
	Engineering Changes	ECP 2018-0022	Fuel Transfer Tube Bolting Reduction	0
	Engineering Evaluations	EER 60-0003-070	Gasket Equivalent Replacement Flexitalic gasket, O-ring, EPDM gasket	11/05/1999
	Miscellaneous	Document Change Request	M-519-00050	5, 6
	Procedures	DB-MM-09186	Fuel Transfer Tube Removal and Installation	1
		DB-PF-03008	Containment Local Leak Rate Tests	21, 22, 23, 24, 25
	Work Orders	200686523	Fuel Transfer Tube 1-1 Local Rate Testing	03/19/2018
		200686524	Fuel Transfer Tube 1-2 Local Leak Rate Testing	03/19/2018
		200688164	Fuel Transfer Tube 1-1	03/20/2018
200755857		200755857 – Fuel Transfer Tube 1-1 Local Leak Rate Testing	03/18/2020	
200755858		Fuel Transfer Tube 1-2 Local Leak Rate Testing	03/18/2020	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		200768446	Fuel Transfer Tube 1-1	03/19/2020
		200822015	Fuel Transfer Tube 1-1	03/29/2022
		200822140	Fuel Transfer Tube 1-2 Local Leak Rate Testing	03/29/2022
		200822141	Fuel Transfer Tube 1-1 Local Leak Rate Testing	03/29/2022
		200880334	Fuel Transfer Tube 1-1	04/20/2022
		200880454	Fuel Transfer Tube 1-2 Local Leak Rate Testing	04/12/2022
		MWO 1747	Fuel Transfer Tube Blind Flanges	06/22/1977