



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

May 9, 2023

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 – COMMERCIAL GRADE  
DEDICATION INSPECTION REPORT 05000346/2023010

Dear Terry Brown:

On April 21, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Davis-Besse Nuclear Power Station and discussed the results of this inspection with Chris Jackson, Plant Manager, and other members of your staff. The results of this inspection are documented in the enclosed report.

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

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

Sincerely,

A handwritten signature in cursive script that reads "Karla K. Stoedter".

Signed by Stoedter, Karla  
on 05/09/23

Karla K. Stoedter, Chief  
Engineering Branch 1  
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 Karla K. Stuedter dated May 9, 2023.

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION – COMMERCIAL GRADE  
DEDICATION INSPECTION REPORT 05000346/2023010

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

Docket Number: 05000346

License Number: NPF-3

Report Number: 05000346/2023010

Enterprise Identifier: I-2023-010-0037

Licensee: Energy Harbor Nuclear Corp.

Facility: Davis-Besse Nuclear Power Station

Location: Oak Harbor, OH

Inspection Dates: April 03, 2023 to April 21, 2023

Inspectors: T. Briley, Senior Project Engineer  
B. Jose, Senior Reactor Inspector  
L. Rodriguez, Senior Reactor Inspector

Approved By: Karla K. Stodter, Chief  
Engineering Branch 1  
Division of Operating Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a Commercial Grade Dedication 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**

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

### **Additional Tracking Items**

None.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## REACTOR SAFETY

### 71111.21N.03 - Commercial Grade Dedication

#### Commercial Grade Dedication (section 03.01) (14 Samples)

The inspectors reviewed the implementation of the licensee's processes for dedicating commercial-grade items (CGI) and services as basic components and for procuring safety-related (SR) structures, systems, and components for the following samples:

- (1) 100117392 - Capacitor: 1500  $\mu$ F, 35 V, Electrolytic, Radial (CGI Dedication)
- (2) 100140710 - Assembly: Reactor Coolant Pump (RCP) Seal Cartridge (CGI Dedication - Inter-Utility Transfer)
- (3) 100140819 - Switch: Limit, 125 VAC/DC, 250 VAC/DC (CGI Dedication - Inter-Utility Transfer)
- (4) 24008906 - Kit: Latch, Door, Motor Control Center (MCC) (CGI Dedication)
- (5) 30244406 - Elbow: Male, 1/4" Tube to Male National Pipe Thread (NPT), 90, Brass (CGI Dedication)
- (6) 36974906 - Connector: Sleeve, Butt Splice, Copper (CGI Dedication)
- (7) 75111806 - Diode: Rectifier, 4 Amp Max Current, 100 V Reverse Voltage (CGI Dedication)
- (8) 84002601 - Coupling: Mechanical, Jaw, 5/8", 1/2", 5/8", 1" (CGI Dedication)
- (9) 86018406 - O-Ring: 5-3/4", 5-1/2", 1/8", Fluorocarbon (CGI Dedication)
- (10) 100070851 - Coupling: Split Ring-Line Shaft, Nitronic 50 (SR Procurement)
- (11) 100045989 - Fuse: Parts Quality Initiative (PQI), 0.5, 4160 VAC, 4.16 kV Switchgear (SR Procurement)
- (12) 84615206 - Bearing: Angular Contact Ball, Single Row (SR Procurement)
- (13) 89560606 - Pump: Soakback, Oil, 7 GPM, 1200 RPM, With Female NPT (SR Procurement)
- (14) 35340306 - Contactor: PQI, Motor, Full Voltage (FV), Non-Reversing (NR), Size 1 (SR Procurement)

## INSPECTION RESULTS

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

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

- On April 21, 2023, the inspectors presented the Commercial Grade Dedication Inspection results to Chris Jackson, Plant Manager, and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21N.03	Corrective Action Documents	CR-2008-45060	MS-C-08-07-16, Missing Information on Procurement Package	08/20/2008
		CR-2019-08976	EDG 2 Soak Back Pump Oil Leak	10/27/2019
		CR-2019-09453	Track Situational Refurbishment Preventive Maintenance (PM) for AFW Control Boards	12/05/2019
		CR-2020-03950	New SW Pump Shafts Are out of Tolerance for Runout	05/04/2020
		CR-2021-06832	As Found Replacement Parts for EDG Found to Be Degraded	09/10/2021
		CR-2021-06908	As Found Condition of Replacement Parts Are Not in Acceptable Condition	09/14/2021
		CR-2021-07364	Oil Leak Identified on the Discharge Union for the Soak Back Pump (P147-2)	10/01/2021
		CR-2022-01935	Main Steam Line Isolation Valve DB-ZS101C Failed Functional Check	03/09/2022
		CR-2022-03501	Incorrect Documentation Identified During Reconciliation of the RRP for Reactor Coolant Pump Seal Replacement	04/21/2022
		CR-2022-04807	Entered DB-OP-02515 Reactor Coolant Pump and Motor Abnormal Operation Due to RCP 1-2 Third Stage Seal Pressure Lowering and Brining in Computer Point P814	06/12/2022
		CR-2022-05563	EDG 2 AC Circ Oil Pump (Soakback Pump) Has Shaft Leakage	08/12/2022
		CR-2023-00476	Preliminary Inspection of RCP 1-2 Removed Seal at Flowserve (Serial Number 199222)	01/23/2023
		Corrective Action Documents Resulting from Inspection	CR-2023-02615	Receipt Inspection Report Filled Out Incorrectly
	CR-2023-02737		HV5261, Control Rom Emergency Ventilation System 1 Outside Air Inlet Damper, Motor Disengagement Handle Is Resting on an Angle Iron Support	04/07/2023
	CR-2023-03183		Parts Not Returned Properly	04/18/2023
	CR-2023-03234		Part Not Returned Properly	04/19/2023
	CR-2023-03274		Stock O-Ring Was Found to Have the Incorrect Shelf-Life on the Tag	04/20/2023
	CR-2023-03275		2023 NRC Commercial Grade Dedication Inspection -	04/20/2023

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
			Control of Parts Process		
		CR-2023-03283	NRC Commercial Grade Dedication Inspection: S/C 24008906 Door Latch Kit Dimensions Not Verified	04/20/2023	
	Drawings	M-045-00002	Model VITX-SD Service Water Pump	11	
	Engineering Changes	19-0041-001	Service Water Pump Refurbishment Upgrades	0	
	Engineering Evaluations	600975527	Supplier Deviation Notification Engine Systems Inc.	06/15/2015	
	Miscellaneous		100070851	Procurement Package - Coupling: Split Ring-Line Shaft, Nitronic	4
			100140710	Procurement Package - RCP Seal Cartridge	2
			24008906	Procurement Package - Westinghouse MCC Door Kit (E0000049)	1
			24974	NUPIC Joint Commercial Grade Survey of Swagelok Company	03/05/2021
			30244406	Procurement Package - Elbow	1
			45394929	Purchase Order - O-ring (Stock Code 86028406)	05/30/2012
			45394929	POQA for Purchase Order 45394929 - O-ring	0
			45473622	POQA for Purchase Order 45473622 - Coupling	1
			45473622	Purchase Order - Coupling (Stock Code 100070851)	05/08/2015
			45488278	Purchase Order - MCC Door Latch Kit	01/29/2016
			45550104	POQA for 45550104 - EDG Soakback Pump, Fuel Oil Pump Coupling	0
			45559619	POQA Angular Contact Single Row Ball Bearing	0
			45656978	Purchase Order - O-ring (Stock Code 86018406)	02/10/2021
			45656978	POQA for PO 45656978 - O-ring	0
			45661759	Purchase Order - Fuse (Stock Code 100045989)	06/22/2021
			45668570	Purchase Order - Reactor Coolant Pump Seal Cartridge	1
			45669086	POQA for Purchase Order 45669086 - Switch	0
			45669086	Purchase Order - Switch (Stock Code 100140819)	02/03/2022
			47577072	Purchase Order - O-ring (Stock Code 86018406)	03/24/2015
		47634175	POQA for Purchase Order 47634175 - Elbow	1	
		47634175	Purchase Order - Elbow (Stock Code 30244406)	01/05/2016	



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		55126424	Purchase Order - Gould's Model VITX-SD 20X 28 BHC, 2 Stage Service Water Pump	8
		55140964	POQA for 55140964 - RCP Seal [PROPRIETARY]	2
		55140964	Purchase Order - RCP Seal Reassembly and Rebuild	01/21/2022
		601348687	Notification - SCN 86901006 Switch Limit: 125 VAC/DC, 250 VAC/DC, 1EA. is Required on 1R22 Work Order 200823432	02/01/2022
		601403962	Notification - It Was Found During NRC CGD Inspection, Shelf Life for SCN 86018406 PO 45656978 Batch # 0000329304 Was Found to Have the Wrong Shelf-Life.	04/20/2023
		601404030	Notification - The NRC CGD Inspection Asked Two Questions with Respect to Interutility Transfer of s/c 100140819, PO 45669086 (ATL-2023-0298)	04/20/2023
		601404032	Notification - Move Inventory From PO 45515963 a/c 24008906 to Blocked Stock	04/20/2023
		601404175	Notification - During the NRC CGD Inspection, the Inspector Asked (ATL 2023-0298-ATA-44) if the Shelf Life NOBP-CC-7004 Section 4.1.3 Needed Revised.	04/21/2023
		84002601	Procurement Package - Coupling-Mechanical Jaw	4
		84615206	Procurement Package - Bearing	5
		86018406	Procurement Package - O-ring	8
		CC-049-PR 20002198-1	Certificate of Conformance/Compliance for Non-Reversing Size 1 Contactor	0
		CC0220547 PO 55141457	Flowserve As Found Condition Report and Repair Plan Revision 1 [PROPRIETARY]	02/15/2023
		CGD1702055-01-01	Commercial Grade Dedication Package for Size 1 Starter Contactors	0
		E-008-00154	Instruction and Maintenance Manual for Motor Control Centers 44692-IMM-0	7
		E0000001	Procurement Package - Insulated, Uninsulated Indent/Compression Electrical Terminations, Lugs, Splices, End Caps and Ferrules	9
		G0000010006	Procurement Package - Electrolytic Capacitors	2

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		G0000010008	Procurement Package - Fittings, Swagelok (Non ASME III) - Elbow	12 and 13
		G0000010252	Procurement Package - Switch	3
		G0000010262	Procurement Package - Bearings	0
		G0000010278	Procurement Package - Small Signal Diodes	1
		G0000010288	Procurement Package - O-ring	3
		M-508-00087	Vendor Manual Byron Jackson N-9000 Seal Cartridge	09/17/2015
		M00000009	Procurement Package - Elbow	7
	Procedures	NOBP-CC-7001	Procurement Packages	22
		NOBP-CC-7004	Shelf Life Evaluation	2
		NOBP-MS-2005	Nuclear Warehousing	11
		NOP-CC-7002	Procurement Engineering	14
		NOP-LP-2020	Quality Control Receipt Inspection	22
		NOP-MS-4001	Warehousing	13
		NOP-OP-1012	Material Readiness and Housekeeping Inspection Program	13
	Work Orders	200574481	PM 0924 P3-3 Rebuild/Install SW Pump 3	10/06/2021
		200663016	Replace the E/P Converter, FYDH13B, for the Decay Heat Cooler 1-1 Bypass Flow Control Valve (i.e., DB-DH13B)	05/02/2019
		200688146	PM 2305 BF11C ME09100 Clean MCC F11C 1R20	03/27/2018
		200741132	PM 1349 K5-2 Insp-Rplc EDG #2	10/17/2019
		200796393	PM 0724 K5-2 24 Mo Ck EDG #2	09/30/2021
		200822903	Replace Circuit Boards for Auxiliary Feedwater (AFW) Pump 1-1 Discharge Control Valve	03/20/2022
		200822975	Replace Circuit Board for AFW Pump 1-2 Discharge Control Valve	04/08/2022
		200823050	Remove and Replace RCP Mechanical Seal in Accordance with DB-MM-09012	04/26/2022
		200823050	PM 2415 Seal Repair and Replace RCP 1-2	05/10/2022
200823432		PM 11928 MS101 Limit Switch Func. Check	04/06/2022	