



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
475 ALLENDALE RD, STE 102
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

July 8, 2024

Barry Blair
Site Vice President
Vistra Operations Company, LLC
Beaver Valley Power Station
P.O. Box 4 - Route 168
Shippingport, PA 15077-0004

SUBJECT: BEAVER VALLEY POWER STATION, UNITS 1 AND 2 – EMERGENCY
PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT
05000334/2024501 AND 05000412/2024501

Dear Barry Blair:

On June 13, 2024, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Beaver Valley Power Station, Units 1 and 2 and 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.

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,

Daniel L. Schroeder, Chief
Security, Emergency Preparedness and Incident
Response Branch
Division of Radiological Safety and Security

Docket Nos. 05000334 and 05000412
License Nos. DPR-66 and NPF-73

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: BEAVER VALLEY POWER STATION, UNITS 1 AND 2 – EMERGENCY
PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT
05000334/2024501 AND 05000412/2024501 DATED JULY 8, 2024

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DOCUMENT NAME: <https://usnrc.sharepoint.com/teams/RI.DRS.PSB.EP/Shared Documents/EP Inspections/EP Inspection Reports/BVPS/Beaver Valley EP EX IR 2024-501.docx>

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers: 05000334 and 05000412

License Numbers: DPR-66 and NPF-73

Report Numbers: 05000334/2024501 and 05000412/2024501

Enterprise Identifier: I-2024-501-0005

Licensee: Vistra Operations Company, LLC

Facility: Beaver Valley Power Station, Units 1 and 2

Location: Shippingport, PA

Inspection Dates: June 10, 2024 to June 13, 2024

Inspectors: J. DeBoer, Senior Emergency Preparedness Inspector
S. Elkhiamy, Senior Project Engineer
E. Eve, Senior Project Engineer
K. Hussar, Senior Physical Security Inspector
J. Lilliendahl, Senior Emergency Response Coordinator
S. Mercurio, Emergency Preparedness Inspector

Approved By: Daniel L. Schroeder, Chief
Security, Emergency Preparedness and Incident Response Branch
Division of Radiological Safety and Security

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an emergency preparedness biennial exercise inspection at Beaver Valley Power Station, Units 1 and 2, 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

71114.01 - Exercise Evaluation

Inspection Review (IP Section 02.01-02.11) (1 Sample)

- (1) The inspectors evaluated the biennial emergency plan exercise. The exercise scenario simulated a loss of AC power to the emergency buses to a single source remaining which then degraded into a total loss of AC power to the emergency buses for greater than 15 minutes.

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The inspectors evaluated the following submitted Emergency Action Level and Emergency Plan changes:
 - BV-2023-010-00, NOP-LP-5505, Facility Activation, Operation and Deactivation, Revision 2
 - BV-2023-011-00, ATL-2023-0546-ATA-06-Determine whether BV2 Supplemental Leak Collection and Release System (SLCRS) main filter bank iodine capture efficiency can be lowered
 - BV-2023-012-00, EPP-PLAN-APPENDIX-E, Corporate Policy Statement, Revision 20
 - BV-2023-013-00, 1/2-ADM-1101, Emergency Response Organization Administration, Revision 29
 - BV-2024-002-00, Change Notice 23-070
 - BV-2024-005-00, EPP-PLAN-Section 5, Revision 35
 - BV-2024-006-00, EPP-PLAN-APPENDIX-C, Emergency Implementing Procedure Listing, Revision 22
 - BV-2024-008-00, EPP-Plan-Appendix-D, Emergency Equipment Listings, Revision 17

This evaluation does not constitute NRC approval.

71114.08 - Exercise Evaluation - Scenario Review

Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

- (1) The inspectors reviewed and evaluated the proposed scenario for the biennial emergency plan exercise, May 1, 2024.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (DEP) Sample (IP Section 02.12) (1 Sample)

- (1) For the period April 1, 2023 – March 31, 2024

EP02: Emergency Response Organization (ERO) Drill Participation (IP Section 02.13) (1 Sample)

- (1) For the period April 1, 2023 – March 31, 2024

EP03: Alert And Notification System (ANS) Reliability Sample (IP Section 02.14) (1 Sample)

- (1) For the period April 1, 2023 – March 31, 2024

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On June 13, 2024, the inspectors presented the emergency preparedness biennial exercise inspection results to Barry Blair, Site Vice President and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.01	Miscellaneous		Beaver Valley Power Station Emergency Preparedness Plan	Revision 15
		L-24-090	Beaver Valley Power Station 2024 NRC Evaluated Exercise Scenario Package	04/09/2024