



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION I
2100 RENAISSANCE BLVD.
KING OF PRUSSIA, PA 19406-2713

July 20, 2016

Mr. Marty Richey
Site Vice President
First Energy Nuclear Operating Company
Beaver Valley Power Station
P. O. Box 4
Shippingport, PA 15077-0004

SUBJECT: BEAVER VALLEY POWER STATION - EVALUATED EMERGENCY
PREPAREDNESS EXERCISE – INSPECTION REPORT 05000334/2016502
AND 05000412/2016502

Dear Mr. Richey:

On June 16, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the June 14, 2016 evaluated emergency preparedness exercise at the Beaver Valley Power Station, Units 1 and 2. The enclosed inspection report documents the inspection results, which were discussed on June 16, 2016, with you and other members of your staff.

The inspection examined activities conducted under your licenses as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your licenses. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

The NRC inspectors did not identify any findings or violations of more than minor significance.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, (if any), will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system, Agencywide Documents Access and Management System (ADAMS).

M. Richey

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ADAMS is accessible from the NRC's Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Raymond McKinley, Chief
Plant Support Branch 1
Division of Reactor Safety

Docket No. 50-334 and 50-412
License No. DPR-66 and NPF-73

Enclosure:

NRC Inspection Report Nos. 05000334/2016502
and 05000412/2016502 w/Attachment:
Supplementary Information

cc w/encl:

GCannon, Director, PA Emergency Management Agency (PEMA)
and Office of Homeland Security
TScardino, RAC Chair, FEMA Region III

M. Richey

-2-

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos. 50-334 and 50-412

License Nos. DPR-66 and NPF-73

Report Nos. 05000334/2016502 and 05000412/2016502

Licensee: FirstEnergy Nuclear Operating Company (FENOC)

Facility: Beaver Valley Power Station, Units 1 and 2

Location: Shippingport, PA 15077

Dates: June 13-17, 2016

Inspectors: S. Barr, Senior Emergency Preparedness Inspector,
Division of Reactor Safety (DRS), Region I (Lead)
J. DeBoer, Emergency Preparedness Inspector, DRS
E. Burket, Reactor Inspector, DRS
T. Hedigan, Operations Inspector, DRS
C. Hobbs, Reactor Inspector, DRS

Approved By: Raymond McKinley, Chief
Plant Support Branch 1
Division of Reactor Safety

Enclosure

SUMMARY

IR 05000334/2016502 and 05000412/2016502; 06/13/2016 – 06/17/2016; Beaver Valley Power Station, Units 1 and 2; Exercise Evaluation – Scenario Review – Performance Indicator Verification.

This report covers an announced inspection conducted by five Region I-based inspectors. No findings were identified during the inspection. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5.

Cornerstone: Emergency Preparedness

No findings were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness (EP)

1EP1 Exercise Evaluation (71114.01 – 1 Sample)

a. Inspection Scope

On June 14, 2016, FirstEnergy Nuclear Operating Company (FENOC) conducted a biennial Beaver Valley emergency preparedness exercise. The inspectors evaluated the adequacy of the licensee's conduct of the exercise, the performance of the Beaver Valley emergency response organization (ERO) to respond to the simulated emergency, and FENOC's capability to assess their own staff performance via a formal critique process, as required by Title 10 of the *Code of Federal Regulations* (CFR) 50.47(b) (14). This overall exercise inspection activity represented the completion of one sample on a biennial cycle.

The exercise evaluation consisted of the following review and assessment:

- The adequacy of FENOC's performance in the biennial full-participation exercise regarding the implementation of the risk-significant planning standards (RSPS) described in 10 CFR 50.47(b)(4), (5), (9), and (10), which are: emergency classification; offsite notification; radiological assessment; and protective action recommendations, respectively.
- The overall adequacy of FENOC's Beaver Valley emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities," and Emergency Plan commitments. The facilities assessed were the Control Room Simulator, Technical Support Center (TSC), and Emergency Operations Facility (EOF).
- A review of other performance areas, such as: the licensee emergency response organization's (ERO's) recognition of abnormal plant conditions; command and control; intra- and inter-facility communications; prioritization of mitigating activities; utilization of repair and field monitoring teams; interface with offsite agencies; staffing and procedure adequacy; and the overall implementation of the emergency plan and its implementing procedures.
- A review of past performance issues from the last NRC Beaver Valley exercise inspection report and FENOC's EP drill reports, to determine the effectiveness of licensee corrective actions as demonstrated during the June 14, 2016, exercise and to ensure compliance with 10 CFR 50.47(b)(14).
- The licensee's post-exercise critiques, to evaluate FENOC's self-assessment of its ERO performance during the June 14, 2016, exercise and to ensure compliance with 10 CFR Part 50, Appendix E, Section IV.F.2.g.

The inspectors reviewed the documents listed in the attachment to this report.

b. Findings

No findings were identified.

1EP8 Exercise Evaluation – Scenario Review (71114.08 – 1 Sample)

a. Inspection Scope

Prior to the June 14, 2016, emergency preparedness exercise, the NRC inspectors conducted an in-office review of the exercise objectives and scenario, FENOC had submitted to the U.S. Nuclear Regulatory Commission (NRC), to determine if the exercise would test major elements of the Beaver Valley Emergency Plan as required by Title 10 of the Code of Federal Regulations (10 CFR) 50.47(b)(14). This overall exercise inspection activity represented the completion of one sample on a biennial cycle. The inspectors reviewed the documents listed in the attachment to this report.

b. Findings

No findings were identified.

4. **OTHER ACTIVITIES (OA)**

4OA1 Performance Indicator (PI) Verification (71151 – 3 Samples)

a. Inspection Scope

The inspectors reviewed data for the Beaver Valley EP PIs, which are: (1) Drill and Exercise Performance (DEP); (2) ERO Drill Participation; and, (3) Alert and Notification System (ANS) Reliability. The last NRC EP inspection at Beaver Valley was conducted in the second calendar quarter of 2015, so the inspectors reviewed supporting documentation from EP drills, training records, and equipment tests from the second calendar quarter of 2015 through the first quarter of 2016, to verify the accuracy of the reported PI data. The review of these PIs was conducted in accordance with NRC Inspection Procedure 71151, using the acceptance criteria documented in NEI 99-02, "Regulatory Assessment Performance Indicator Guidelines," Revision 6.

This inspection activity represented the completion of three samples.

b. Findings

No findings were identified.

4OA6 **Meetings, including Exit**

On June 16, 2016, the inspectors presented the results of this inspection to Mr. M. Richey, Beaver Valley Site Vice President, and other members of the FENOC staff. No proprietary information was provided to the inspectors during this inspection.

ATTACHMENT
SUPPLEMENTAL INFORMATION
KEY POINTS OF CONTACT

Licensee Personnel

M. Richey, Site Vice President
S. Sawtschenko, Emergency Preparedness Manager

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

None.

LIST OF DOCUMENTS REVIEWED

Section 1EP1: Exercise Evaluation

Miscellaneous

Beaver Valley Power Station Emergency Preparedness Plan, Revision 30
Emergency Preparedness Plan Implementing Procedures, Table of Contents Revision 17
Beaver Valley Power Station 2016 Evaluated Exercise Scenario Package
Condition Reports documented in the Beaver Valley Power Station June 14, 2016,
Evaluated Exercise Report, dated July 13, 2016

Section 1EP8: Exercise Evaluation – Scenario Review

Miscellaneous

Beaver Valley Power Station Emergency Preparedness Plan, Revision 30
Beaver Valley Power Station 2016 Evaluated Exercise Scenario Package
1/2-EPP-IP-7.2, Administration of Emergency Preparedness Plan, Drills and Exercises,
Revision 14

Section 4OA1: Performance Indicator (PI) Verification

Miscellaneous

1/2-ADM-1111, NRC EPP Performance Indicator Instructions, Revision 11
DEP PI data, April 2015 – March 2016
ERO Drill Participation PI data, April 2015 – March 2016
ANS Reliability PI data, April 2015 – March 2016

LIST OF ACRONYMS

AF	Alternative Facility
ANS	Alert Notification System
CFR	Code of Federal Regulations
DEP	Drill and Exercise Performance
EOF	Emergency Operations Facility
EP	Emergency Preparedness
EPP	Emergency Preparedness Plan
ERO	Emergency Response Organization
FENOC	First Energy Nuclear Operating Company
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
PAR	Protective Action Recommendation
PI	Performance Indicator
RSPS	Risk Significant Planning Standard