UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 2, 2022

Mr. John J. Grabnar
Site Vice President
Energy Harbor Nuclear Corp.
Beaver Valley Power Station
Mail Stop P-BV-SSEB
P.O. Box 4, Route 168
Shippingport, PA 15077-0004

SUBJECT: BEAVER VALLEY POWER STATION, UNITS 1 AND 2 - SUMMARY OF REGULATORY AUDIT IN SUPPORT OF LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION 3.3.5, "LOSS OF POWER (LOP) DIESEL GENERATOR (DG) START AND BUS SEPARATION INSTRUMENTATION" (EPID L-2021-LLA-0156)

Dear Mr. Grabnar:

By letter dated August 29, 2021 (Agencywide Document Access Management System (ADAMS) Accession No. ML21242A125), Energy Harbor Nuclear Corp. (the licensee) requested an amendment to Facility Operating License Nos. DPR-66 and NPF-73 for the Beaver Valley Power Station (Beaver Valley), Unit Nos. 1 and 2. The proposed amendment would revise the Technical Specification (TS) 3.3.5, "Loss of Power (LOP) Diesel Generator (DG) Start and Bus Separation Instrumentation."

The U.S. Nuclear Regulatory Commission (NRC) staff conducted a virtual audit to support its review of the license amendment request (LAR) using an internet-based portal provided by the licensee. An audit plan was issued by the NRC staff by letter dated November 24, 2021 (ADAMS Accession No. ML21328A030). Using the portal, the NRC staff reviewed calculations and analyses related to the LAR but not available on the Beaver Valley dockets.

Following the audit, the NRC staff identified and requested additional information via e-mail dated March 9, 2022 (ADAMS Accession No. ML22068A182). The licensee provided responses to the NRC staff's requests for additional information via letter dated April 4, 2022 (ADAMS Accession No. ML22094A115).

The enclosure to this letter is the regulatory audit summary.

If you have any questions, please contact me at 301-415-0680 or by e-mail to Brent.Ballard@nrc.gov.

Sincerely,

Brent T. Ballard

Digitally signed by Brent T. Ballard
Date: 2022.05.02 13:32:24 -04'00'

Brent T. Ballard, Project Manager
Plant Licensing Branch I
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosure:
Regulatory Audit Summary

cc: Listserv

OFFICE OF NUCLEAR REACTOR REGULATION

REGULATORY AUDIT SUMMARY

TO SUPPORT REVIEW OF LICENSE AMENDMENT REQUEST

TO REVISE TECHNICAL SPECIFICATION 3.3.5, "LOSS OF POWER (LOP) DIESEL GENERATOR (DG) START AND BUS SEPARATION INSTRUMENTATION"

BEAVER VALLEY POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-334 AND 50-412

1.0 BACKGROUND

By letter dated August 29, 2021 (Agency wide Document Access Management System (ADAMS) Accession No. ML21242A125), Energy Harbor Nuclear Corp. (the licensee) requested an amendment to Facility Operating License Nos. DPR-66 and NPF-73 for the Beaver Valley Power Station, Unit Nos. 1 and 2. The proposed amendment would revise the Technical Specification (TS) 3.3.5, "Loss of Power (LOP) Diesel Generator (DG) Start and Bus Separation Instrumentation."

An audit plan was issued by the U.S. Nuclear Regulatory Commission (NRC) staff by letter dated November 24, 2021 (ADAMS Accession No. ML21328A030). The scope of the audit was to gain a better understanding of the LAR, to verify information provided in the LAR, and to identify any information that may require docketing to support the basis of the NRC staff's licensing decision. The NRC staff performed an audit of the calculations performed by the licensee related to the LAR, via an internet-based portal.

2.0 AUDIT DATES AND LOCATION

The regulatory audit was conducted via an internet-based portal provided by the licensee in the months of January and February 2022.

3.0 AUDIT TEAM MEMBERS

The NRC audit team members consisted of:

- Vijay Goel, Electrical Engineer, Team Leader
- Richard Stattel, Senior Electronics Engineer
- Vu Hang, Electronics Engineer
- Nadim Khan, Electrical Engineer

Enclosure

4.0 DOCUMENTS AUDITED

The following documents related to the LAR were reviewed during the audit:

a) Calculations/analyses performed to determine analytic limits of the Loss of Voltage Relays and Degraded Voltage Relays.

In particular, the following documents were reviewed:

- Calculation No. 8700-E-345, Rev. 1 for BVPS [Beaver Valley Power Station]-1, “Voltage and Time Delays Analysis for Unit 1 Undervoltage Protection Scheme.”
- Calculation No. 10080-E-346, Rev. 1 for BVPS-2, “Voltage and Time Delays Analysis for Unit 2 Undervoltage Protection Scheme.”
- Calculation No. 8700-E-271, Rev. 3, Addendum 4 for BVPS-1, “Station Service System Dynamic Stability Study.”
- Calculation No. 10080-E-271, Rev. 1, Addendum 6 and 7 for BVPS-2 “Transient Stability Analysis.”

b) Calculations/analyses performed to determine the proposed nominal trip setpoints and allowable values of (1) the existing Loss of Voltage Relays and (2) the time delays for the new Degraded Voltage Relays.

In particular, the following documents were reviewed:

- Westinghouse Topical Reports:
  - WCAP-11419, Revision 6, (for BVPS-1) and
  - WCAP-11366, Revision 7, (for BVSP-2).
- Calculation No. 8700-DEC-0212, Revision 2, "Beaver Valley Unit 1, 4.1 kV Emergency Bus Undervoltage: Trip Feed and Start Diesel Uncertainty Calculations".
- Calculation No. 10080-DEC-0215, Revision 2, "Beaver Valley Unit 2, 4.1 kV Emergency Bus Undervoltage: Trip Feed and Start Diesel Uncertainty Calculations".
- Calculation No. E-529, Revision 1, "Beaver Valley Units 1 and 2, Degraded Voltage Relay (DVR) Time Delay Relay Instrument Uncertainty".

The NRC staff did not download, copy or retain possession of any documents that were made available to the audit team.

5.0 AUDIT ACTIVITIES

The audit was conducted by reviewing the relevant portions of calculations/analyses listed in Section 4.0, via internet-based portal. The focus of the audit was to gain a better understanding of the LAR, to verify information provided in the LAR, and to identify information that may require docketing to support the basis of the NRC staff’s licensing decision. Aside from verifying that the documents requested by the staff were accessible on the internet-based portal, there were no person-to-person interactions between the audit team and the licensee.

The NRC staff verified that the information in the LAR agreed with the information provided in the documents provided on the internet-based portal. Based on the review of the documents, the NRC staff identified and requested additional information via e-mail dated March 9, 2022 (ADAMS Accession No. ML22068A182). The licensee provided responses to the NRC staff's requests for additional information via letter dated April 4, 2022 (ADAMS Accession No. ML22094A115).

There were no deviations from the audit plan. No regulatory decisions were made during the audit.

6.0 EXIT BRIEFING

The audit was performed via internet-based portal, and there were no person-to-person interactions between the audit team and the licensee. Therefore, there was no need of a formal exit briefing.

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ADAMS Accession No.: ML22108A292

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DATE	04/28/2022	04/29/2022	05/02/2022

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