



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

December 15, 2021

Mr. John J. Grabnar
Site Vice President
Beaver Valley Power Station
P.O. Box 4
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNITS 1 AND 2 – AUDIT PLAN TO SUPPORT LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION 3.3.5, “LOSS OF POWER (LOP) DIESEL GENERATOR (DG) START AND BUS SEPARATION INSTRUMENTATION” (EPID NO. L-2021-LLA-0156)

Dear Mr. Grabnar:

By letter dated August 29, 2021, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21242A125), Energy Harbor Nuclear Corporation (the licensee), requested an amendment to Facility Operating License Nos. DPR-66 and NPF-73 for the Beaver Valley Power Station, Units 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 has reviewed the license amendment request and determined that a regulatory audit would assist in the timely completion of the review. The NRC staff will conduct a regulatory audit to support its review in accordance with the enclosed audit plan. A regulatory audit is a planned activity that includes the examination and evaluation of primarily non-docketed information.

The audit will be conducted to increase the NRC staff’s understanding of the LAR and identify information that will require docketing to support the NRC staff’s regulatory findings. The audit will be conducted from January 3, 2022 to February 28, 2022, through an online portal established by the licensee.

If you have any questions, please contact me by telephone at 301-415-8004 or e-mail to Sujata.Goetz@nrc.gov.

Sincerely,

/RA/

Sujata Goetz, Project Manager
Plant Licensing Branch I
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos.: 50-334 and 50-412

Enclosure:
Audit Plan

cc: Listserv

SUBJECT: BEAVER VALLEY POWER STATION, UNITS 1 AND 2 – AUDIT PLAN IN SUPPORT OF REVIEW OF LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION 3.3.5, “LOSS OF POWER (LOP) DIESEL GENERATOR (DG) START AND BUS SEPARATION INSTRUMENTATION” (EPID NO. L-2021-LLA-0156) DATED DECEMBER 15, 2021

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ADAMS Accession No.: ML21347A883 *by e-mail

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UNITED STATES
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REGULATORY AUDIT PLAN

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, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21242A125), Energy Harbor Nuclear Corporation (the licensee), requested an amendment to Facility Operating License Nos. DPR-66 and NPF-73 for the Beaver Valley Power Station (Beaver Valley), Units 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 has determined the need for a regulatory audit to be conducted in accordance with the Office of Nuclear Reactor Regulation, Office Instruction LIC-111, "Regulatory Audits" (ADAMS Accession No. ML082900195), for the NRC staff to examine the licensee's non-docketed information with the intent to gain a better understanding of the license amendment request (LAR), to verify information, and to identify information that would require docketing to support the basis of the NRC staff's licensing decision.

2.0 REGULATORY AUDIT BASIS

The NRC staff (i.e., audit team) will perform the audit to support its evaluation of whether the licensee's request meets the requirements of Section 50.36(c)(1)(ii)(A), "Limiting Safety System Settings (LSSS)," and Section 50.36(c)(2), "Limiting conditions for operation (LCO)," of Title 10 of the *Code of Federal Regulation* (10 CFR); General Design Criteria (GDC) 13, "Instrumentation and Control [I&C]," and GDC 17, "Electric power systems," of 10 CFR Part 50, Appendix A; and the plant-specific principal design criteria for electrical and I&C systems described in the BVPS Units 1 and 2 Updated Final Safety Analysis Reports.

3.0 INFORMATION AND OTHER MATERIAL NECESSARY FOR THE REGULATORY AUDIT

The NRC staff requests the licensee to have the following information readily available and accessible for the staff's review via an online portal, as discussed in Section 6.0:

1. Relevant summary of studies/calculations to verify how the minimum voltage analytic limits of 3141 Volt (V) for BVPS-1, and 3253 V for BVPS-2 have been derived, as provided in Section 3.1, and described in the Enclosure to the LAR, Section 3.1.1.
2. Relevant summary of studies/calculations to verify how the starting of the "A" reactor coolant pump at BVPS-1 or BVPS-2 can cause significant voltage dips at the 1AE or 2AE emergency 4160 V buses, respectively, whereas starting the "B" or "C" reactor coolant pump at either unit does not significantly affect the voltages at the emergency 4160 V buses, as described in the Enclosure to the LAR, Section 3.1.3.
3. Relevant summary of studies/calculations to verify the methodology used for calculating the Maximum Time Delay Analytical Limit (with safety injection signal), as described in the Enclosure to the LAR, Section 3.2.1.
4. Relevant summary of studies/calculations to verify the methodology used for calculating the Minimum Time Delay Analytical Limit (with safety injection signal), as described in the Enclosure to the LAR, Section 3.2.2.
5. References 1 and 2 of the LAR:
 - (1) Westinghouse Electric Company (Westinghouse) Topical Report WCAP-11419, Revision 6, "Westinghouse Setpoint Methodology for Protection Systems – Beaver Valley Power Station Unit 1"
 - (2) Westinghouse Topical Report WCAP-11366, Revision 7, "Westinghouse Setpoint Methodology for Protection Systems – Beaver Valley Power Station Unit 2."

In Section 3.1.2, "Loss of Voltage [LOV] Relay Nominal Trip Setpoints and Allowable Value [AV]," the licensee specified that the setpoint uncertainty or channel statistical allowance (CSA) is calculated in accordance with the setpoint methodology defined in References 1 and 2.

6. Relevant summary of studies/calculations to verify the methodology used for calculating the proposed Nominal Trip Setpoints (NTS) and AV for LOV relays, as described in the Enclosure to the LAR, Section 3.1.2.
7. Relevant summary of studies/calculations to verify the methodology used for calculating the proposed Time Delay NTS and AV for Degraded Voltage Relays (DVRs) (with safety injection signal), as described in the Enclosure to the LAR, Section 3.2.3.

The NRC staff will review the documents the licensee provides and determine if any additional documents are needed.

4.0 TEAM ASSIGNMENTS

The audit team will consist of the following NRC staff:

- Vijay Goel, Electrical Engineer, Team Leader [vijay.goel@nrc.gov]
- Richard Stattel, Senior Electronics Engineer [richard.stattel@nrc.gov]
- Vu Hang, Electronics Engineer [hang.vu@nrc.gov]
- Nadim Khan, Electrical Engineer [nadim.khan@nrc.gov]
- Sujata Goetz, Project Engineer [sujata.goetz@nrc.gov]

5.0 LOGISTICS

The audit will be held from January 3, 2021 to February 28, 2022 via telephone and through an online portal established by the licensee. The online portal is discussed in Section 6.0.

The audit team will conduct a telephone conference with the licensee for the purposes of introducing the team, discussing the scope of the audit, and describing the information to be made available on the online portal. The audit team will also confirm with the licensee if the information made available on the online portal contains any sensitive or proprietary information. The audit team may request that representatives of the licensee answer any audit team questions during the audit related to information provided on the portal at a mutually agreeable day and time by telephone conference.

The NRC staff will not conduct formal entrance or exit meetings; however, the NRC's project manager will inform the licensee via routine communications when the staff no longer needs access to the portal information. The NRC staff does not foresee the need for an onsite visit or in-person discussions between the NRC and licensee staff at this time. However, if the need for a such a meeting is identified in the future, the audit plan will be revised, and the schedule for the audit will be adjusted accordingly. The NRC project manager will coordinate any changes to the audit schedule and location with the licensee.

6.0 Online Portal

The audit team will access the documents listed in Section 3.0 above through an online portal established by the licensee that allows the audit team to access documents via the internet. The following conditions associated with the online portal must be maintained throughout the duration that the audit team has access to the online portal:

- The online portal must be password-protected, and separate passwords will be assigned to the NRC staff and contractors who are participating in the audit.
- The online portal must be sufficiently secure to prevent the NRC staff and contractors from printing, saving, downloading, or collecting any information on the online portal.
- Conditions of use of the online portal must be displayed on the login screen and will require acknowledgement by each user.

Username and password information should be provided directly to the NRC staff. The NRC project manager will provide the licensee the names and contact information of the NRC staff who will be participating in the audit (see Section 4.0). All other communications should be coordinated through the NRC project manager.

7.0 DELIVERABLES

An audit summary, which may be public, will be prepared within 60 days of the completion of the audit. If the NRC staff identifies information during the audit that is needed to support its regulatory decision, the NRC staff will issue requests for additional information to the licensee.