



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

January 31, 2022

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

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 - CLOSEOUT OF
GENERIC LETTER 2004-02, "POTENTIAL IMPACT OF DEBRIS BLOCKAGE
ON EMERGENCY RECIRCULATION DURING DESIGN BASIS ACCIDENTS AT
PRESSURIZED-WATER REACTORS" (EPID L-2017-LRC-0000)

Dear Mr. Grabnar:

By letter dated September 13, 2004, The U.S. Nuclear Regulatory (NRC) issued Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors" (Agencywide Documents Access Management System (ADAMS) Accession No. ML042360586) requesting that licensees address the issues raised by Generic Safety Issue - 191, "Assessment of Debris Accumulation on Pressurized Water Reactor Sump Performance."

The purpose of GL 2004-02 was to demonstrate compliance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 Section 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors." Specifically, the GL requested licensees to perform an evaluation of the emergency core cooling system (ECCS) and containment spray system (CSS) recirculation systems and, if necessary, take additional action to ensure that the thermal insulation and other materials from broken pipes do not block the ECCS sump strainers or flow paths and prevent coolant from entering the reactor core. Lack of coolant in the core could cause core damage and containment failure.

By letter dated May 16, 2013 (ADAMS Accession No. ML13136A144), FirstEnergy Nuclear Operating Company (the licensee) provided a response to GL-2004-02 for the Beaver Valley Power Station Units 1 and 2. Subsequently FirstEnergy Nuclear Operating Company changed names and became Energy Harbor Nuclear Corp and on November 30, 2020 (Accession No. ML20335A564) and May 27, 2021, Energy Harbor (the current licensee) provided additional responses to GL-2004. In order for the NRC staff to complete its review, by letter dated March 23, 2021 (ADAMS Accession No. ML21082A494), the NRC issued a final request for additional information.

The NRC staff has performed a thorough review of all responses provided by the licensee and finds that Energy Harbor Nuclear Corp has provided adequate information as requested by GL 2004-02. The NRC staff conclusions have been documented (ADAMS Accession No. ML22019A265). The NRC staff finds the information provided demonstrates that debris will not inhibit the ECCS or CSS performance of its intended function in accordance with

10 CFR 50.46. Therefore, the NRC staff finds the licensee's responses to GL 2004-04 are adequate and considers GL 2004-02 closed for the Beaver Valley Power Station, Units 1 and 2. No further information or action is requested of the licensee.

If you have any questions, please call me at 301-415-8004.

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:
NRC Staff Review of GL 2004-02
for Beaver Valley

cc: Listserv

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PKG: ML22013A372

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