



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

November 6, 2020

Mr. Rod L. Penfield
Site Vice President
Energy Harbor Nuclear Corp.
Beaver Valley Power Station
P.O. Box 4
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNIT 1 AND 2 – TEMPORARY EXEMPTION FROM BIENNIAL EMERGENCY PREPAREDNESS EXERCISE FREQUENCY REQUIREMENTS OF 10 CFR PART 50, APPENDIX E, SECTION IV.F.2.C (EPID-L-2020-LLE-0149 [COVID-19])

Dear Mr. Penfield:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has approved the below temporary exemption from specific requirements of Appendix E to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Section IV.F.2.c, for Beaver Valley Power Station, Units 1 and 2 (Beaver Valley). This action is in response to your application dated September 22, 2020, as supplemented by letter dated October 9, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML20266G336 and ML20283A772, respectively) from the Pennsylvania Emergency Management Agency that requested a one-time exemption to requirements in 10 CFR Part 50, Appendix E, Section IV.F.2.c, to exclude participation of the offsite response organizations (OROs) in the biennial emergency preparedness (EP) exercise for calendar year (CY) 2020.

Energy Harbor Nuclear Corp. (Energy Harbor, the licensee) holds Renewed Facility Operating License Nos. DPR-66 and NPF-73, which authorize operation of Beaver Valley, Units 1 and 2. These licenses are subject to the rules, regulations, and orders of the Commission. The facility consists of two pressurized-water reactors located in Beaver County, Pennsylvania.

By letter dated September 22, 2020, Energy Harbor submitted a request for temporary exemption from Appendix E to 10 CFR Part 50, Section IV.F.2.c, regarding the performance of the CY 2020 biennial EP exercise for responsible OROs.

The requirements in 10 CFR Part 50, Appendix E, Section IV.F.2.c, state, in part:

Offsite plans for each site shall be exercised biennially with full participation by each offsite authority having a role under the radiological response plan.

On January 31, 2020, the U.S. Department of Health and Human Services declared a public health emergency (PHE) for the United States to aid the nation's healthcare community in responding to the Coronavirus Disease 2019 (COVID-19). Subsequently, the Centers for

Disease Control and Prevention (CDC) issued recommendations (e.g., social distancing, limiting assemblies) in an attempt to limit the spread of COVID-19.¹

In your application, you provided the following information:

- The requested exemption supports the continued implementation of the isolation activities (e.g., social distancing, group size limitations, self-quarantining) to protect required ORO personnel in response to the COVID-19 PHE. These activities are needed to ensure that supporting State and local government personnel are isolated from COVID-19 and remain capable of executing the functions of the emergency response organization (ERO), as described in the Beaver Valley Emergency Plan, as well as other non-nuclear health and safety functions for the benefit of the public.
- The threat of COVID-19 spread has resulted in the inability to safely conduct the offsite biennial EP exercise that was scheduled for November 10, 2020. The Commonwealth of Pennsylvania, on behalf of Beaver County (the county in which Beaver Valley is located), the State of Ohio, Columbiana County in Ohio, the State of West Virginia, and Hancock County in West Virginia, have communicated to Energy Harbor that they have concerns with supporting the biennial EP exercise and maintaining protection of its staff during the current COVID-19 PHE response. Based on these concerns, the needed response to the PHE, and the uncertainty of the future in this matter, the licensee determined that the need to seek a one-time exemption regarding the ORO participation in the CY 2020 Beaver Valley biennial EP exercise was the most appropriate action. The OROs continue to maintain readiness to respond to an actual radiological emergency at Beaver Valley.
- This one-time schedular exemption to exclude participation of the ORO in the biennial EP exercise in CY 2020 supports continued implementation of the isolation activities (e.g., social distancing, group size limitations, self-quarantining, etc.) to protect required ERO and ORO personnel in response to the COVID-19 PHE.
- The last biennial EP exercise was conducted on June 12, 2018. Since that time, the licensee has conducted drills, exercises, and other training activities that have exercised its emergency response strategies in coordination with offsite authorities. These activities included the following: Beaver Valley integrated drills (with partial ORO participation) conducted on August 30, 2018; September 13, 2018; January 23, 2019; April 30, 2019; September 4, 2019; and November 21, 2019, and a Pennsylvania and West Virginia ingestion exercise on March 12, 2019.
- The licensee will continue to conduct drills, exercises, and other training activities that exercise the Beaver Valley emergency response strategies. State and local authorities are expected to participate to the extent practical, while also complying with the CDC recommendations to limit the spread of COVID-19.
- The licensee made a reasonable effort to reschedule the exercise during CY 2020 with the respective OROs but was unsuccessful. Rescheduling within CY 2020 already occurred with the selection of the only available date (November 10, 2020) for the required participants. In addition, the licensee also determined that it is not feasible to

¹ CDC, "How to Protect Yourself and Others," April 18, 2020 (ADAMS Accession No. ML20125A069)

schedule the biennial EP exercise in CY 2021 due to uncertainty of COVID-19 isolation actions, conflicts with other NRC inspections, and scheduled refueling outages (one unit in spring 2021; one unit in fall 2021).

- The licensee also noted that the OROs have indicated agreement with this exemption request. The OROs have also indicated they will maintain their current radiological emergency plans and remain able to respond to an emergency during the pandemic.
- The exemption from participation in the exercise does not obviate the ability to respond should an actual nuclear power plant radiological emergency occur. Letters of support from the Commonwealth of Pennsylvania, on behalf of Beaver County, the State of Ohio, Columbiana County in Ohio, the State of West Virginia, and County of Hancock in West Virginia are provided by the licensee in its submittal.

Pursuant to 10 CFR 50.12, "Specific exemptions," the NRC may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50 when (1) the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security, and (2) special circumstances are present.

The NRC staff determined that the requested exemption is permissible under the Atomic Energy Act of 1954, as amended, and that no other prohibition of law exists to preclude the activities that would be authorized by the exemption. Therefore, the NRC staff finds that the requested exemption is authorized by law.

The regulations in 10 CFR Part 50, Appendix E, IV.F.2.c, concern requirements for licensees to conduct biennial EP exercises at their facilities. No new accident precursors are created by allowing the licensee to postpone the offsite participation portion of the biennial EP exercise from CY 2020 until CY 2022. Thus, the probability and consequences of postulated accidents are not increased. In addition, the requested exemption for a one-time change to the biennial EP exercise schedule has no relation to security issues. Therefore, the NRC staff finds that the requested exemption will not present an undue risk to the public health and safety and is consistent with the common defense and security.

Special circumstances, per 10 CFR 50.12, that apply to the requested exemption include:

The following 10 CFR 50.12 criteria were provided by the licensee:

- a. 10 CFR 50.12(a)(2)(iv): "The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption,"

Offsite organizations are currently dealing with COVID-19 in their daily duties. Participation in the biennial exercise presents a potential health risk for those who may become exposed to COVID-19. Through this exposure, they could become unable to perform their duties during a real-life emergency.

Therefore, granting the requested exemption from the 10 CFR Part 50, Appendix E, Section IV.F.2.c requirement for offsite participation in the CY 2020 biennial EP exercise for Beaver Valley, with the next performance of the exercise to be no later than the end of CY 2022, would result in benefit to the public health and safety that

compensates for any decrease in safety that may result from the granting of the exemption.

- b. 10 CFR 50.12(a)(2)(v): “The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation.”

The ongoing threat of the spread of COVID-19 has resulted in the inability to safely conduct the November 10, 2020 exercise with full ORO participation. The Commonwealth of Pennsylvania, on behalf of Beaver County (the county in which Beaver Valley is located); the State of Ohio; Columbiana County in Ohio; the State of West Virginia; and Hancock County in West Virginia have communicated to Energy Harbor Nuclear Corp. that they have concerns with supporting the biennial exercise and maintaining protection of their staff during the current COVID-19 pandemic response.

The Commonwealth of Pennsylvania and the States of Ohio and West Virginia will continue to work with Federal Emergency Management Agency (FEMA) in support of further relief for offsite participation as appropriate under FEMA’s requirements in 44 CFR 350.9.

Therefore, granting the requested exemption from the 10 CFR Part 50, Appendix E, Section IV.F.2.c requirement for offsite participation in the CY 2020 biennial EP exercise for Beaver Valley, with the next performance of the exercise to be no later than the end of CY 2022, would provide only temporary relief from the applicable regulation and the licensee has made good faith efforts to comply with the regulation.

In addition to the above 10 CFR 50.12 criteria provided by the licensee, the NRC staff also considered criterion (a)(2)(ii).

- c. 10 CFR 50.12(a)(2)(ii): “Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.”

The regulation in 10 CFR Part 50, Appendix E, Section, IV.F.2.c, requires offsite plans for each site to be exercised biennially with full participation by each offsite authority having a role under the plan. The underlying purpose of these requirements is to ensure that the emergency organization personnel are familiar with their duties and to identify and correct any weaknesses that may exist in the licensee’s EP program. The underlying purpose of Section IV.F.2.c is also to test and maintain interfaces among affected State and local authorities and the licensee.

The NRC recognizes that even if a licensee were to be exempted from the requirement to conduct an offsite biennial exercise in CY 2020, in the event of an actual radiological emergency, offsite authorities would respond. Offsite authorities in all states are currently demonstrating response capabilities, including making decisions on protective actions for the public, in response to the COVID-19 PHE.² Additionally, the NRC continues to monitor U.S. nuclear power plants to ensure that

² COVID-19 Resources for State Leaders, Executive Orders – By State, accessed August 12, 2020, <https://web.csg.org/covid19/executive-orders/>

they operate safely during the COVID-19 PHE and that defense in depth is maintained to prevent accidents from happening and to mitigate their consequences.

The NRC has consulted with FEMA on the readiness of OROs and the use of this information to inform the NRC decision to grant exemptions, per the NRC/FEMA Memorandum of Understanding.³ FEMA has recently performed assessments of all offsite emergency response plan capabilities and has concluded that offsite radiological EP remains adequate to provide reasonable assurance that appropriate measures can and will be taken to protect the health and safety of the public in a radiological emergency during the COVID-19 PHE.⁴ FEMA monitors response and preparedness capabilities of the OROs to ensure that the response to the current PHE does not adversely impact its ability to protect the public health and safety in the event of a radiological emergency at a commercial nuclear power plant. Exercises are just one of the many methods by which FEMA assesses and validates the adequacy of ORO plans and the ability to implement those plans. In accordance with current FEMA program guidance,⁵ FEMA has alternative means of conducting these assessments.

Based on the above, granting requests for exemption from the 10 CFR Part 50, Appendix E, Section IV.F.2.c requirement for offsite biennial exercises in CY 2020, with the next performance of the exercise to be no later than the end of CY 2022, would allow State and local governments to continue to focus their essential response efforts on the COVID-19 PHE. This exemption would apply only to the requirements of 10 CFR Part 50, Appendix E, Section IV.F.2.c, and would not address 44 CFR Part 350. An exemption from Section IV.F.2.c would not prevent a State or local authority, at its discretion, from demonstrating key skills in drills and exercises for the 8-year exercise cycle or prevent a State or local authority from conducting the exercise in CY 2020 or CY 2021.

The licensee stated that it has conducted drills, exercises, and other training activities that have exercised its emergency response strategies since the last evaluated biennial EP exercise and that State and local OROs have participated.

Therefore, the NRC staff finds that the underlying purposes of 10 CFR Part 50, Appendix E, Section, IV.F.2.c, are met with the rescheduled offsite biennial EP exercise to occur in CY 2022.

Based on the above, the NRC staff finds that the special circumstances of 10 CFR 50.12(a)(2)(ii), 10 CFR 50.12(a)(2)(iv), and 10 CFR 50.12(a)(2)(v) are present.

NRC approval of the requested exemption is categorically excluded under 10 CFR 51.22(c)(25), and there are no extraordinary circumstances present that would preclude reliance on this

³ "Memorandum of Understanding (MOU) Between the Department of Homeland Security/Federal Emergency Management Agency and Nuclear Regulatory Commission Regarding Radiological Response, Planning and Preparedness," December 7, 2015 (ADAMS Accession No. ML15344A371)

⁴ FEMA Preparedness Assessments (ADAMS Accession Nos. ML20164A275, ML20174A603, ML20141L795, ML20170B043, ML20170B171, ML20167A175, ML20164A038, ML20154K696, ML20154K617, ML20150A110, and ML20162A056)

⁵ Program Manual, Radiological Emergency Preparedness, FEMA P-1028, December 2019, accessed August 12, 2020, https://www.fema.gov/media-library-data/1577108409695-4e49a0a56c8c62695dcc301272a1eda7/FEMA_REP_Program_Manual_Dec_2019.pdf

exclusion. The NRC staff determined, per 10 CFR 51.22(c)(25)(vi)(E), that the requirements from which the exemption is sought involve education, training, experience, qualification, requalification, or other employment suitability requirements. The NRC staff also determined that approval of this exemption involves no significant hazards consideration because it does not authorize any physical changes to the facility or any of its safety systems, change any of the assumptions or limits used in the licensee's safety analyses, or introduce any new failure modes. There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite because this exemption does not affect any effluent release limits as provided in the licensee's technical specifications or by the regulations in 10 CFR Part 20, "Standards for Protection Against Radiation." There is no significant increase in individual or cumulative public or occupational radiation exposure because this exemption does not affect limits on the release of any radioactive material or the limits provided in 10 CFR Part 20 for radiation exposure to workers or members of the public. There is no significant construction impact because this exemption does not involve any changes to a construction permit. There is no significant increase in the potential for or consequences from radiological accidents because the exemption does not alter any of the assumptions or limits in the licensee's safety analysis. In addition, the NRC staff determined that there would be no significant impacts to biota, water resources, historic properties, cultural resources, or socioeconomic conditions in the region. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the approval of the requested exemption.

Granting the requested exemption does not impact NRC findings of reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at Beaver Valley. In the statement of considerations for the standards to be applied when considering whether to grant exemptions ("Specific Exemptions; Clarification of Standards, Final Rule," 50 FR 50764, dated December 12, 1985), the Commission stated:

While compliance with all NRC regulations provides reasonable assurance of adequate protection of the public health and safety, the converse is not correct, that failure to comply with one regulation or another is an indication of the absence of adequate protection, at least in a situation where the Commission has reviewed the noncompliance and found that it does not pose an "undue risk" to the public health and safety. Furthermore, the Commission has never defined the concept of "defense-in-depth" to preclude the granting of an exemption from a regulation as long as the applicable exemption criteria are met. In fact, the Commission has recognized that its regulations may provide for the possibility of exemptions when an appropriately high level of safety is in fact achieved and the public interest is served.

The NRC staff has determined that in accordance with 10 CFR 50.12, the requested exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security; and that special circumstances are present. Therefore, the NRC hereby grants the licensee's request for a one-time schedular exemption from the requirements for the biennial EP exercise in 10 CFR Part 50, Appendix E, Section IV.F.2.c.

This exemption expires on December 31, 2022, or when the offsite biennial EP exercise is performed in CY 2022, whichever occurs first.

R. Penfield

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If you have any questions, please contact the Beaver Valley project manager, Jennifer Tobin, at 301-415-2328 or by e-mail to Jennifer.Tobin@nrc.gov.

Sincerely,

Craig G. Erlanger, Director
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

cc: Listserv

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