

From: Wall, Scott
Sent: Thursday, March 4, 2021 9:37 AM
To: Lashley, Phil H (EH); Morgan, Jeffrey D.
Cc: Dickson, Billy; Ospino, Ty; Ruiz, Robert
Subject: Perry Nuclear Power Plant - Verbal Authorization of Request VR-5, Revision 0 (EPID No. L-2021-LLR-0008)

Dear Mr. Lashley:

By telephone conversation on March 3, 2021, the U.S. Nuclear Regulatory Commission (NRC) staff provided a verbal authorization to Energy Harbor Nuclear Corp. (the licensee) for the alternative **VR-5, Revision 0**, for Perry Nuclear Power Plant (Perry) proposing one-time extensions of testing for certain Perry valves scheduled for the upcoming spring 2021 refueling outage. The NRC staff's evaluation and verbal authorization is repeated at the end of this e-mail.

The following NRC and licensee personnel participated in the conference call:

NRC

Nancy Salgado – Chief, Plant Licensing Branch III
Angela Buford – Chief, Mechanical Engineering and Inservice Testing Branch
Bob Wolfgang – Senior Mechanical Engineer
Yuken Wong – Senior Mechanical Engineer
Gurjendra Bedi – Mechanical Engineer
Ian Tseng – Mechanical Engineer
Jason Huang – Mechanical Engineer
Michael Farnan – Mechanical Engineer
Nicholas Hansing – Mechanical Engineer
Scott Wall – Senior Project Manager

Energy Harbor Nuclear Corp.

Rod Penfield – Site Vice President
Darin Benyak – Senior Vice President, Fleet Nuclear Support
Alexandra Zelaski – Manager, Nuclear Work Control
Dave Olderman – Supervisor, Nuclear Engineering Programs
Justin Truxall – Nuclear Engineer
Jacob Zbiegien – Nuclear Engineer
Jeff Morgan – Licensing Engineer
Dave McCreary – Licensing Engineer
Ken McMullen – Licensing Engineer
Phil Lashley – Fleet Licensing Manager

Please contact me if you have any questions.

Scott P. Wall, LSS BB, BSP

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VERBAL AUTHORIZATION BY THE NRC OFFICE OF NUCLEAR REACTOR REGULATION
FOR 10 CFR 50.55a REQUEST VR-5, REVISION 0
VALVE TESTING EXTENSION
ENERGY HARBOR NUCLEAR CORP
PERRY NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-440
EPID NO. L-2021-LLR-0008
MARCH 3, 2021

Technical Evaluation read by Angela Buford, Chief, Mechanical Engineering and Inservice Testing Branch, Division of Engineering and External Hazards, NRC Office of Nuclear Reactor Regulation

By letter dated January 28, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21028A796), as supplemented by letter dated February 22, 2021 (ADAMS Accession No. ML21053A010), [Energy Harbor Nuclear Corp.] the licensee proposed to the [U.S. Nuclear Regulatory Commission] NRC, an alternative to specific inservice testing requirements in the [American Society of Mechanical Engineers] ASME [*Operation and Maintenance of Nuclear Power Plants, Division 1, OM Code: Section IST*] OM Code, 2012 Edition, for [Perry Nuclear Power Plant, Unit No. 1] Perry, pursuant to [Title 10 of the *Code of Federal Regulations*, Part 50, Section 55a] 10 CFR 50.55a.

In particular, the licensee submitted 10 CFR 50.55a Request VR-5, Revision 0, requesting NRC authorization to extend the performance of testing for two specific relief valves at Perry listed in the request from the upcoming refueling outage 1RF18, scheduled to begin on March 7, 2021, to the next refueling outage 1RF19, scheduled to occur in the spring of 2023. The NRC staff's evaluation described in this Verbal Authorization applies only to the two specific relief valves at Perry listed in the submittal dated January 28, 2021, as supplemented by letter dated February 22, 2021.

In those documents, the licensee provided justification that compliance with the provisions in ASME OM Code, Mandatory Appendix I, "Inservice Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants," paragraph I-1350, "Test Frequency, Classes 2 and 3 Pressure Relief Valves," subparagraph (a), "10-Yr Test Interval," as incorporated by reference in 10 CFR 50.55a, to conduct testing of a minimum of 20 percent of the relief valves from each valve group within any 48-month interval would result in a hardship without a compensating increase in the level of quality and safety in accordance with 10 CFR 50.55a(z)(2), if performed at this time. For example, the licensee indicated that valve work at this time would represent a hardship during this [Coronavirus Disease 2019] COVID-19 outbreak, because the licensee intends to reduce the number of personnel on site to prevent the spread of COVID-19 at Perry. Also, with vendor personnel working remotely, the production schedule of the vendor providing the relief valves to be used as pre-tested replacements has been impacted. This impact will challenge the acquisition of qualified and tested replacement relief valves.

In its February 22, [2021,] supplement, the licensee provided clarification that it was requesting an alternative to the requirement that a minimum of 20 percent of the valves from each valve group be tested within any 48-month interval. In addition, the licensee provided the results of the post removal pressure tests of the relief valves in the test groups from 2009 to 2017. The NRC staff noted that relief valve 1E51-F0018 lifted at a pressure lower than the acceptance

criteria range; however, the consequence of the early pressure relief to the plant operation is minimal. Relief valve 1E51-F0018 was removed and replaced by a new valve before this pressure test was performed.

Based on the information described above for the two relief valves at Perry identified in the licensee's request, the NRC staff finds that (1) previous pressure testing of these valves indicates their acceptable historical performance except relief valve 1E51-F0018 which was replaced by a new valve; (2) no current concerns with the performance of these relief valves have been identified; (3) periodic maintenance activities are not modified by this request; and (4) a hardship exists for the performance of team-oriented pressure testing of these relief valves at this time that would be contrary to the health and safety of plant personnel.

Therefore, the NRC finds that the licensee's proposed alternative, applicable to the extension of the 48 month testing interval for the two specified relief valves, submitted in accordance with 10 CFR 50.55a(z)(2), will provide reasonable assurance that these two relief valves at Perry will be operationally ready to perform their safety functions until the next refueling outage, scheduled for the spring of 2023. All other ASME OM Code requirements as incorporated by reference in 10 CFR 50.55a for which relief or an alternative was not specifically requested and approved in this request dated January 28, 2021, as supplemented by letter dated February 22, 2021, remain applicable. If the licensee identifies a performance issue with either of these two relief valves, the licensee will be expected to take action to implement the requirements of its Technical Specifications. This authorization will remain in effect until restart from the next refueling outage for Perry, scheduled for the spring of 2023. The licensee's testing plans for these two relief valves may be adjusted as appropriate by any subsequent NRC-authorized alternative requests.

Authorization read by Nancy Salgado, Chief of the Plant Licensing Branch III, Office of Nuclear Reactor Regulation

As Chief of the Plant Licensing Branch III, Office of Nuclear Reactor Regulation, I agree with the conclusions of the Mechanical Engineering and Inservice Testing Branch.

The NRC staff concludes that the proposed alternative, under Request Number VR-5, Rev. 0, for Perry will provide reasonable assurance of adequate safety until the next refueling outage, scheduled for the spring of 2023, when testing for the two specific relief valves will be performed.

The NRC staff finds that complying with the pressure testing requirements of the ASME OM Code, Mandatory Appendix I, paragraph I-1350(a), as required by 10 CFR 50.55a, for the valves within the scope of this alternative request would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Accordingly, the NRC staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(2).

Therefore, effective March 3, 2021, the NRC authorizes the use of Request Number VR-5, Rev. 0, until completion of the next refueling outage, scheduled for the spring of 2023. All other requirements in ASME OM Code for which relief or an alternative was not specifically requested and approved in this alternative request remain applicable.

This verbal authorization does not preclude the NRC staff from asking additional clarification questions regarding Request Number VR-5, Rev. 0, while subsequently preparing the written safety evaluation.

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