

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-7, Revision 0 (EPID No. L-2021-LLR-0009)

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-7, 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

Senior Project Manager
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
301.415.2855
Scott.Wall@nrc.gov

VERBAL AUTHORIZATION BY THE NRC OFFICE OF NUCLEAR REACTOR REGULATION
FOR 10 CFR 50.55a REQUEST VR-7, REVISION 0
CHECK VALVE TESTING EXTENSION
ENERGY HARBOR NUCLEAR CORP.
PERRY NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-440
EPID NO. L-2021-LLR-0009
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 29, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21031A002), 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-7, Revision 0, requesting NRC authorization to extend the performance of testing for four specific check 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 four specific check valves at Perry listed in the submittal dated January 29, 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, Subsection ISTC, "Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants," paragraph ISTC-3510, "Exercising Test Frequency," and paragraph ISTC-3522, "Category C Check Valves," subparagraph (c), as incorporated by reference in 10 CFR 50.55a, to conduct exercising testing of check valves every refueling outage 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 the performance of exercise testing of check valves at this time would represent a hardship during this [Coronavirus Disease 2019] COVID-19 outbreak, because the licensee intends to reduce the amount of personnel on site to prevent the spread of COVID-19 at Perry. This reduction would include qualified leak rate testing contractors to perform the check valve exercise tests, as well as carpenters to erect scaffolding for access to the valves.

The licensee stated that these valves have a leak rate acceptance criterion of ≤ 200 gallons per minute when they are tested at $\geq 1.1 P_a$, where P_a is the limit for the peak containment pressure during a loss of coolant accident. The leakage tests performed on these valves from 2003 to the present have met the acceptance criterion. The licensee considers that this successful test history supports an extension of the leakage test interval for these valves.

In its February 22, [2021,] supplement, the licensee provided the results of the recent leak rate tests conducted to satisfy the exercise close tests for the four check valves. The licensee corrected a reference in its original submittal to the applicable subsection of the ASME OM Code for the subject check valves. The licensee clarified that the four check valves are ASME OM Code Category AC valves based on their self-actuating operation and seat leakage limitations.

Based on the information described above for the four check valves at Perry identified in the licensee's submittal, the NRC staff finds that (1) previous testing of these check valves indicates their acceptable historical performance; (2) no current concerns with the performance of these check 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 exercise testing of these check 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 close exercise (including leakage) testing interval for the four specified check valves, submitted in accordance with 10 CFR 50.55a(z)(2), will provide reasonable assurance that these check 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 29, 2021, as supplemented by letter dated February 22, 2021, remain applicable. If the licensee identifies a performance issue with any of these check 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 exercise testing plans for these check 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-7, Rev. 0, for Perry will provide reasonable assurance of adequate safety until the next refueling outage, scheduled for the spring of 2023 when exercise testing for the four specific check valves may be performed.

The NRC staff finds that complying with the exercising testing requirements of the ASME OM Code, Subsection ISTC, 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-7, 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-7, Rev. 0, while subsequently preparing the written safety evaluation.

Hearing Identifier: NRR_DRMA
Email Number: 1056

Mail Envelope Properties (SA0PR09MB60581A72FDC916D7393DDF6392979)

Subject: Perry Nuclear Power Plant - Verbal Authorization of Request VR-7, Revision 0
(EPID No. L-2021-LLR-0009)
Sent Date: 3/4/2021 9:36:46 AM
Received Date: 3/4/2021 9:36:49 AM
From: Wall, Scott

Created By: Scott.Wall@nrc.gov

Recipients:
"Dickson, Billy" <Billy.Dickson@nrc.gov>
Tracking Status: None
"Ospino, Ty" <Tyrone.Ospino@nrc.gov>
Tracking Status: None
"Ruiz, Robert" <Robert.Ruiz@nrc.gov>
Tracking Status: None
"Lashley, Phil H (EH)" <phlashley@energyharbor.com>
Tracking Status: None
"Morgan, Jeffrey D." <jdmorgan@energyharbor.com>
Tracking Status: None

Post Office: SA0PR09MB6058.namprd09.prod.outlook.com

| Files | Size | Date & Time |
|---------|------|---------------------|
| MESSAGE | 9026 | 3/4/2021 9:36:49 AM |

Options
Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date: