



Energy Harbor Nuclear Corp.
Perry Nuclear Power Plant
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January 29, 2021
L-21-054

10 CFR 50.55a

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject:
Perry Nuclear Power Plant
Docket No. 50-440, License No. NPF-58
10 CFR 50.55a Request Number VR-7, Revision 0, Check Valve Testing Extension

In accordance with 10 CFR 50.55a(z)(2), Energy Harbor Nuclear Corp. hereby requests Nuclear Regulatory Commission (NRC) staff approval of request VR-7, Revision 0, that proposes a one-time extension of exercise testing for certain Perry Nuclear Power Plant check valves scheduled for the upcoming spring 2021 refueling outage. The enclosed request identifies the affected components, applicable code requirements, and descriptions and bases for the proposed alternative.

Because of the hardship produced by the recent pandemic and the resulting national state of emergency, Energy Harbor Nuclear Corp. is requesting expedited NRC approval of this request. To support the critical generation and startup of Perry Nuclear Power Plant from its scheduled spring 2021 refueling outage, Energy Harbor Nuclear Corp. requests approval of the proposed alternative by February 12, 2021.

There are no regulatory commitments contained in this submittal. If there are any questions or if additional information is required, please contact Mr. Phil H. Lashley, Manager, Fleet Licensing, at (330) 696-7208.

Sincerely,

Penfield, Rod 55166
site vp
I am approving this document
Jan 29 2021 3:46 PM
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Rod L. Penfield

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Enclosure:

Perry Nuclear Power Plant 10 CFR 50.55a Request Number VR-7, Revision 0

cc: NRC Region III Administrator
NRC Resident Inspector
NRR Project Manager

Enclosure A
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Perry Nuclear Power Plant
10 CFR 50.55a Request Number VR-7, Revision 0

(2 pages follow)

Proposed Alternative
In Accordance with 10 CFR 50.55a(z)(2)
--Hardship Without a Compensating Increase in Quality and Safety—

1. ASME Code Components Affected

Component ID	Component Description	Code Class	Valve Category
1B21-F032A	Feedwater Header A Outboard Isolation Check Valve	1	C
1B21-F032B	Feedwater Header B Outboard Isolation Check Valve	1	C
1N27-F559A	Feedwater Header A Containment Check Valve	1	C
1N27-F559B	Feedwater Header B Containment Check Valve	1	C

2. Applicable Code Edition and Addenda

American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code, Subsection ISTD, 2012 Edition.

3. Applicable Code Requirements

ASME OM Code, Subsection ISTC 3510, "Exercising Test Frequency," states in part that:

Active Category A, Category B, and Category C check valves shall be exercised nominally every 3 mo [months], except as provided by paras. ISTC-3520, ISTC-3540, ISTC-3550, ISTC-3570, ISTC-5221, and ISTC-5222.

Subsection ISTC-3522, "Category C Check Valves," part (c) states that:

If exercising is not practicable during operation at power and cold shutdowns, it shall be performed during refueling outages.

4. Reason for Request

To prevent the spread of COVID-19 at Perry Nuclear Power Plant, and to protect the health and safety of plant personnel while maintaining responsibilities to support critical infrastructure, Energy Harbor Nuclear Corp. intends to reduce the amount of personnel on-site during the spring 2021 refueling outage. This includes qualified leak rate contractors to perform the check valve exercise tests, as well as carpenters to erect scaffolding for access to the valves. Deferral of the tests would reduce the number of personnel being brought to the site who would be working in close proximity to each other for extended periods of time.

Because of the hardships caused by the COVID-19, Energy Harbor Nuclear Corp. is requesting a one-time extension of check valve exercise testing scheduled for the spring 2021 refueling outage.

5. Proposed Alternative and Basis for Use

As an alternative to Subsection ISTC-3522(c) of the ASME OM Code, Energy Harbor Nuclear Corp. proposes a one-time extension of check valve exercise testing scheduled for the spring 2021 refueling outage. Testing to meet Subsection ISTC-3522(c) will resume during the next scheduled refueling outage in the spring of 2023. To implement the spring 2021 refueling outage tests under the current conditions would result in undue hardship without providing a compensating increase to quality and safety.

Due to the safety function that the check valves perform in the closed position, a letter dated March 4, 1999 (Accession No. ML20207K094) established a commitment that these valves be water-leak-rate-tested to satisfy the Inservice Testing Program requirements. The valves have a leak rate acceptance criterion of less than or equal to 200 gallons per minute when tested at greater than or equal to 1.1 P_a , where P_a is the limit for the peak containment pressure during a loss of coolant accident. From 2003 to present, the leakage tests performed for all four check valves has met the acceptance criterion.

Based on the test history, there is reasonable assurance that the affected valves (listed in Section 1) will remain operationally ready until the 2023 refueling outage.

6. Duration of Proposed Alternative

The proposed alternative is requested for use during the PNPP fourth 10-year in-service test interval. The proposed alternative would be a one-time extension of exercise testing of the affected check valves (listed in Section 1 above) during the spring 2021 refueling outage. Exercise testing of the Category C check valves in accordance with subsections ISTC-3510 and ISTC-3522(c) would resume in the 2023 refueling outage.