

**From:** [Brent Ballard](#)  
**To:** [Miller, Michael A](#); [Kivi, Jeffrey L](#)  
**Cc:** [Jeff Whited](#); [Jacobson, Ronald G](#)  
**Subject:** Prairie Island Unit 2 - Final RAI for Alternative RR-09 (EPID L-2024-LLR-0015)  
**Date:** Monday, February 12, 2024 8:53:00 PM  
**Attachments:** [Prairie Island Unit 2 - FINAL Request for Additional Information Alternative RR-09.docx](#)

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Hi Mike and Jeff,

By electronic submission dated February 11, 2024 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML24042A001), Northern States Power Company (NSPM, the licensee), a Minnesota corporation, doing business as Xcel Energy, submitted Alternative Request RR-09 for the Inservice Testing (IST) Program at Prairie Island Nuclear Generating Plant, Unit 2.

The NRC staff has determined that additional information is needed to complete its review. Attached is NRC staff's request for additional information (RAI).

Part d. to RAI-1 is revised for clarity as discussed during our clarification call this evening. As discussed during the call, the NRC staff is requesting a response to the RAI by tomorrow, February 13, 2024. Please let me know if you have any questions.

Thank you,

Brent Ballard  
Project Manager  
Plant Licensing Branch III  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
301-415-0680

REQUEST FOR ADDITIONAL INFORMATION

ALTERNATIVE REQUEST RR-09

SAFETY INJECTION SYSTEM AND VOLUME CONTROL SYSTEM

CATEGORY C CHECK VALVE QUARTERLY TESTING

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2

DOCKET NUMBER 50-306

EPID NUMBER L-2024-LLR-0015

By electronic submission dated February 11, 2024 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML24042A001), Northern States Power Company (NSPM, the licensee), a Minnesota corporation, doing business as Xcel Energy, submitted Alternative Request RR-09 for the Inservice Testing (IST) Program at Prairie Island Nuclear Generating Plant, Unit 2. Pursuant to Title 10 of *Code of Federal Regulations* (10 CFR) Section 50.55a(z)(2), the proposed alternative requests to defer quarterly testing of certain Category C check valves in the Safety Injection system and Volume Control system until the next refueling outage or the end of the Fifth 10-Year IST Program interval, currently scheduled to end on December 20, 2024, whichever comes first.

The U.S. Nuclear Regulatory Commission (NRC) staff has determined that additional information is required to complete its review of the request.

The NRC regulations in 10 CFR 50.55a(z) specify the following:

Alternatives to the requirements of paragraphs (b) through (h) of this section or portions thereof may be used when authorized by the Director, Office of Nuclear Reactor Regulation. A proposed alternative must be submitted and authorized prior to implementation. The applicant or licensee must demonstrate that:

(1) *Acceptable level of quality and safety.* The proposed alternative would provide an acceptable level of quality and safety; or

(2) *Hardship without a compensating increase in quality and safety.* Compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

## **RAI-1**

The proposed duration of Alternative Request RR-09 is “from approval until the next Unit 2 refueling outage or the end of the 5th interval whichever comes first.” The request states the Fifth 10-Year IST Program interval is scheduled to end on December 20, 2024. Prairie Island's next refueling outage (RFO) is expected to occur in the fall of 2025. In light of these date differences, the NRC staff requests the following information:

- a. Is NSPM considering an extension of the Fifth 10-Year IST Program interval per American Society of Mechanical Engineers (ASME) Operation and Maintenance of Nuclear Power Plants (OM) Code, Subsection ISTA, paragraph ISTA-3120?
- b. If NSPM is planning to extend the Fifth 10-Year IST Program interval, please confirm NSPM meets the ASME OM Code requirements of paragraph ISTA-3120 to extend the interval.
- c. Based on the current IST Program Plan, the fall 2025 RFO will take place during the Sixth 10-Year IST Program interval. The NRC process does not authorize alternatives for future 10-Year IST Program intervals because each request must be re-evaluated for acceptability with respect to the ASME OM Code edition required for the future IST program. In isolated situations, a licensee has justified a request to extend the duration of a proposed alternative for a short duration into the next IST Program interval. See NRC SE dated July 27, 2023, for Comanche Peak Alternative Request RV-1 (ML23198A321). If NSPM is planning for the request to extend beyond the end of the Fifth 10-Year IST Program interval, the licensee will need to justify that extension in Alternative Request RR-09.
- d. If the Fifth 10-Year IST Program interval is extended by the application of ISTA-3120, the alternative, if authorized, would remain applicable until the end of the extended Fifth 10-Year IST Program interval. If the Fifth 10-Year IST Program interval is extended, please confirm NSPM will conduct the tests of the subject check valves the next opportunity that plant conditions support testing.

## **RAI-2**

Per 10 CFR 50.55a(z), the NRC staff may only authorize an alternative request for future activities. For the requirement of ISTC-5221(a)(3) applicable to check valve 2VC-8-3, please confirm if the alternative is requested for subsequent testing requirements.