



MONTICELLO 10 CFR 50.55a(z)(1) ALTERNATIVE TO REVISE THE EXCESS FLOW CHECK VALVE TEST FREQUENCY APPLYING THE SURVEILLANCE FREQUENCY CONTROL PROGRAM

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- Inservice Testing Background
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Purpose

Discuss a proposed 10 CFR 50.55a(z)(1) alternative for establishing the Excess Flow Check Valve (EFCV) testing frequency.

The Monticello Nuclear Generating Plant (MNGP) Surveillance Frequency Control Program (SFCP) (Specification 5.5.15) is proposed to be used to establish the EFCV test frequency rather than applying the frequency specified in the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code).

Inservice Testing Background

- MNGP is currently operating under the fifth ten-year Inservice Test (IST) interval – scheduled to end on September 30, 2022.
- MNGP sixth IST ten-year interval begins October 1, 2022.
- MNGP will then transition to the ASME OM Code – 2017 Edition with no Addenda.
- This 10 CFR 50.55a(z)(1) alternative is requested for the sixth IST ten-year interval.

Inservice Testing Background

The ASME OM Code – 2017 Edition (no Addenda) requires:

- Subsection ISTC-3522 – “Category C Check Valves,” requires under ISTC-3522(c) that if exercising is not practicable during operation at power and cold shutdown outages, it shall be performed during refueling outages.
- Subsection ISTC-3630 – “Leakage Rate for Other Than Containment Isolation Valves,” requires under ISTC-3630(a), which specifies the frequency, that tests be conducted at least once every 2 years.

Proposed Alternative

EFCV testing is performed in accordance with MNGP TS Surveillance Requirement (SR) 3.6.1.3.8 which states:

“Verify each reactor instrumentation line EFCV actuates on a simulated instrument line break to restrict flow to ≤ 2 gpm.”

The surveillance is performed every 24-months in accordance with the SFCP.

Proposed Alternative

Specification 5.5.15, “Surveillance Frequency Control Program,”
Item b. states:

“Changes to the Frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, “Risk-Informed Method for Control of Surveillance Frequencies,” Revision 1.”

Amendment 200 approved application of the SFCP to the frequencies specified to be under the SFCP in the MNGP TS.

Proposed Alternative

Specification 5.5.15 requires use of NEI 04-10, Revision 1, which is a risk-informed method to change surveillance frequencies:

- Uses probabilistic risk assessment (PRA) methods
- Uses plant performance data
- Addresses surveillances performed on a Staggered Test Basis
- Requires performance monitoring of Systems / Structures / Components whose surveillance frequencies have been revised.

Summary

An alternative to the ASME OM Code test frequency is proposed as determined under the MNGP Specification 5.5.15 SFCP:

- The SR 3.6.1.3.8 test frequency was approved to be controlled under the SFCP.
- The SFCP is required to apply the NRC approved method established in NEI 04-10, Revision 1.
- NEI 04-10 establishes appropriate controls and a feedback mechanism to ensure testing at the determined frequency provides an acceptable level of quality and safety.

Summary (continued)

An alternative to the ASME OM Code test frequency is proposed as determined under the MNGP Specification 5.5.15 SFCP:

- Projected date for submittal of the alternative – February 2022.
- Authorization is requested for the spring 2023 Refueling Outage.

