

# Exelon In-Service Testing

Supplemental Position Indication Relief Request

NRC Pre-Application Meeting  
June 24, 2020



Exelon Generation®

# Purpose

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Brief the NRC on proposed Inservice Testing Relief Request for Exelon NPPs that are currently on or going to the 2012 Edition of the OM Code in 2020 by covering the following:

- Extension of Supplemental Position Indication (SPI) testing frequency for valves that have seat leakage testing frequency governed by an NRC approved process (10 CFR 50 Appendix J, Option B) or alternate NRC approved process (Relief Request)

# Agenda

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- Current In Service Test SPI requirement
- Overview of the proposed Relief Request
- Summary
- Precedent
- Conclusion and Timeline

# Current In Service Test SPI Requirement

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10CFR50.55a(b)(3)(xi): Licensees shall verify that valve operation is accurately indicated by supplementing valve position indicating lights with other indications, such as flow meters or other suitable instrumentation, to provide assurance of proper obturator position.

- Required when implementing the 2012 Edition of the OM Code.
  - SPI testing be performed once every two (2) years.
- Exelon is requesting relief from the Code requirement from performing SPI once every two (2) years for valves governed by an NRC approved performance based leakrate testing program.
- This OM Code requirement is more restrictive than seat leakage requirements of 10 CFR 50 Appendix J, Option B. An alternative is proposed that will provide an acceptable level of quality and safety. 10 CFR 50.55a(z)(1)

# Overview of the Proposed Relief Request

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- SPI frequency will follow an NRC approved performance based requirement:
  - Containment Isolation Valves:
    - Appendix J requirements
  - Pressure Isolation Valves:
    - Approved Relief Request requirements
  - Boundary valves:
    - Tested as part of a performance based leakage test will follow their respective requirement (Appendix J or approved Relief Request)
- Applicable to the population of IST valves eligible for extended frequency testing subject to the above requirements

# Overview of the Proposed Relief Request

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- Open SPI testing will be performed at the same frequency as the seat leakage test.
  - Open testing is often performed in the same procedure.
  - Aligns with divisional outage strategy.
  - Matches the Condition and OM Mandatory Appendix guidance.
- SPI frequency for Motor Operated Valves
  - No requested change.
  - Continue to follow Appendix III frequency per 2012 OM Code requirement and not align with the performance based seat leakage frequency.

# Summary

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SPI frequency and testing relief will provide an acceptable alternative while maintaining the level of quality and safety:

- SPI testing will match and follow the rules of NRC approved performance based seat leakage testing frequencies.
- Un-necessary seat leakage tests will not be performed solely to satisfy SPI requirements.
- Divisional outage strategy will be preserved which reduces outage risk by maintaining one division/train operational.

# Precedent

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- APS - Palo Verde Nuclear Generating Station submitted a Relief Request for an alternative SPI frequency requesting that valves subject to seat leakage testing follow the 10 CFR 50 Appendix J performance based test frequencies



# Conclusion and Relief Request Submittal

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## Conclusion

- Exelon is requesting relief from the Code requirement of performing SPI once every 2 years for valves governed by a NRC approved or alternate NRC approved performance based methodology. The proposed alternative will provide an acceptable level of quality and safety.
- Submittal to include one (1) Corporate Relief Request to modify the SPI testing interval from its current two (2) year frequency to the proposed NRC approved seat leakage test frequencies.

Submittal is planned for July 2020.

Request for approval six months from submittal to support Exelon Spring Refueling Outages

# Questions?



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