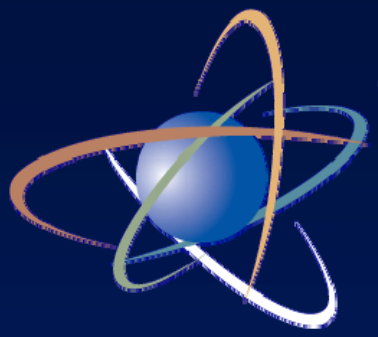

Scope of the Snubber Program
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- This presentation addresses snubber scope only - not the frequency, method, or criteria for snubber testing.

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Topics for Discussion

- Issue – Scope of the Snubber Program
- NRC Position - Scope of the Snubber Program
- Basis - Scope of the Snubber Program
- Discussion – Scope of the Snubber Program
- Conclusion – Scope of the Snubber Program
- Recommendation – Scope of the Snubber Program

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Issue - Scope of the Snubber Program

- NRC staff has observed an issue that some licensees have used ASME BPV Code Section XI, IWF-1230, to eliminate certain snubbers from inservice inspection (ISI) scope while exempting supports from ISI examination.

- NRC staff has also observed that some vendor/contractor reports have referenced IWF-1230 to eliminate certain snubbers from ISI scope.

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NRC Position - Scope of the Snubber Program

- The Snubber Program must include all snubbers used in a system that performs a specific function in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, in mitigating the consequences of an accident, or to ensure the integrity of the reactor coolant pressure boundary.
- Licensees have the responsibility to demonstrate the continued operability of all snubbers within the scope of their snubber inservice examination and testing program.
- While using ASME BPV Code Section XI, IWF-1230 to exempt specific supports from inservice examination, IWF-1230 should not be used to exempt snubbers from inservice inspection and testing.

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Basis - Scope of the Snubber Program

- The following regulatory documents and guidelines should be considered in determining the full scope of the Snubber Program:
  - Title 10 of the Code of Federal Regulations (10 CFR) Section 50.55a
    - ASME *Boiler & Pressure Vessel Code* (BPV Code), Section XI
    - ASME Code for *Operation and Maintenance* (OM Code)
  - Technical Specifications (TS); or Technical Requirements Manual (TRM)
  - 10 CFR Part 50
    - Appendix A, “General Design Criteria for Nuclear Power Plants”
    - Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants”
  - 10 CFR Part 100, “Reactor Site Criteria”
  - NRC Standard Review Plan (SRP) Section 3.9.6, “Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints”

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Basis - Scope of the Snubber Program (cont.)

- 10 CFR 50.55a
  - 10 CFR 50.55a(g)(4) requires that, throughout the service life of a BWR & PWR nuclear power facility, ASME BPV Code Class 1, 2, 3 and MC components (including supports) meet the inservice inspection and testing requirements of ASME BPV Code, Section XI, or ASME OM Code, as incorporated by reference in 10 CFR 50.55a(a)(i).

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Basis - Scope of the Snubber Program

- ASME BPV Code, Section XI
  - ASME BPV Code, Section XI, IWF-1230, "Supports Exempt from Examination," states that supports exempt from the examination requirements of the IWF-2000 are those connected to piping and other items exempt from volumetric, surface, or VT-1 or VT-3 visual examination by IWB-1220, IWC-1220, IWD-1220, and IWE-1220. In addition, the portion of supports that are inaccessible by being encased in concrete, buried underground, or encapsulated by guard pipe are also exempt from examination requirements of IWF-2000, "Examination and Inspection."
  - IWF-2100 states that "The requirements of this Article IWF-2000 apply to the examination and inspection of component supports, but not to the inservice test requirements of IWF-5000."

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Basis- Scope of the Snubber Program (cont.)

- ASME BPV Code, Section XI (cont.)
  - ASME/ANSI OM Part 4, Section 1.3.2, “Operational Readiness,” states that OM Part 4 intends to demonstrate operational readiness of ASME BPV Code Class 1, 2, 3, and MC snubbers.

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Basis - Scope of the Snubber Program (cont.)

- ASME OM Code
  - ISTA-1100 states that dynamic restraints (snubbers) include those used in a system that performs a specific function in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, in mitigating the consequences of an accident, or to ensure the integrity of the reactor coolant pressure boundary.

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Basis- Scope of the Snubber Program (cont.)

- 10 CFR Part 50, Appendix A and Appendix B
  - General Design Criterion (GDC) 1, "Quality Standards and Records," of Appendix A, "General Design Criteria for Nuclear Plants," to 10 CFR Part 50 requires that all structures, systems, and components (SSCs) that are necessary for safe operation must be tested to demonstrate that they will perform satisfactorily in service. Among other things, GDC 1 requires that components that are important to safety must be tested to quality standards that are commensurate with the importance of the safety function(s) to be performed.
  - Appendix B to 10 CFR Part 50 describes the quality assurance program, which includes testing, for safety-related components.

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Basis- Scope of the Snubber Program (cont.)

- 10 CFR Part 100
  - 10 CFR Part 100, “Reactor Site Criteria,” specifies SSCs that must be designed to remain functional during and following a “safe shutdown earthquake” as those necessary to ensure:

    (1) the integrity of the reactor coolant pressure boundary,

    (2) the capability to shutdown the reactor and maintain it in a safe shutdown condition, or

    (3) the capability to prevent or mitigate the consequences of an accident that could result in potential offsite exposures comparable to the guideline exposures.

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Basis- Scope of the Snubber Program (cont.)

- SRP Section 3.9.6
  - SRP 3.9.6 states that review of the inservice testing program will include the ASME BPV Code Class 1, 2, and 3 system snubbers whose function is required for safety, as well as snubbers not categorized as ASME BPV Code Class 1, 2, and 3 but which are safety related.

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Discussion - Scope of the Snubber Program (cont.)

- All the above regulatory documents and guidelines show that the Snubber Program must include all snubbers used in a system that performs a specific function in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, in mitigating the consequences of an accident, or to ensure the integrity of the reactor coolant pressure boundary.

- Use of IWF-1230 for the snubber program without considering other regulatory requirements might exempt some safety related snubbers or non-safety related snubbers which are important to safety.

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Conclusion - Scope of the Snubber Program

- Licensees are cautioned that while using IWF-1230 to exempt specific supports from inspection and tests, IWF-1230 shall not be used to exempt snubbers from inservice examination and testing.

- NRC staff may prepare a Regulatory Issue Summary (RIS) to clarify the Scope of the Snubber Program.

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Recommendation - Scope of the Snubber Program

- Licensees who believe that some of the items discussed in this presentation are applicable to their facilities may wish to review their current snubber program and modify their program as appropriate.

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Questions?

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