

USED FUEL STORAGE AND TRANSPORTATION ISSUE SUMMARY FORM

Issue Number: I-10-01 Revision: 0

I. Problem Statement (Provide a clear, concise description of the issue. Use continuation sheet as required.)

Certain Westinghouse PWR fuel assemblies fabricated before 1985 are susceptible to stress corrosion cracking (SCC) of the top nozzle guide tube sleeves. This SCC can result in the top nozzle separating from the fuel assembly when lifted or possibly when subjected to other loads. The classification of these assemblies with regard to dry storage and transportation is unclear. In addition, it is not clear whether additional hardware, if used to structurally enhance the assembly after reactor operation, must be licensed as authorized contents for storage and transportation. Clarification of the NRC's position on this matter is necessary so that licensees and CoC holders can implement a safe, consistent, regulatorily compliant approach to dealing with this fuel.

II. Screening Criteria (Provide an explanation as to how the issue meets each of the screening criteria to be considered for generic issue resolution. Use continuation sheet as required.)

- 1. Does the proposed issue involve spent fuel storage or transportation and affect multiple 10 CFR 71 or 10 CFR 72 regulated entities?** Yes. There are over 10,000 fuel assemblies in wet storage at numerous plant sites that are susceptible to SCC and need to be moved to dry storage under 10 CFR 72 and ultimately transported under 10 CFR 71.
- 2. Why does the proposed issue warrant generic resolution?** Part 71 and 72 licensees and CoC holders wish to address this fuel with a consistent, yet flexible approach with which NRC concurs.
- 3. Why does the issue warrant engagement between the industry and NRC?** Different licensees and CoC holders have used different approaches for dealing with this fuel and the NRC staff's position is not well understood or documented. In addition, an inspection report and follow-up communication for a single licensee implies that licensing action is necessary but does not provide additional guidance.
- 4. Why is the issue not already adequately covered by another process?** This issue has unique characteristics that are not addressed in any existing NRC staff review guidance, inspection procedure, or regulatory guide.
- 5. What tangible benefits will generic resolution of the issue produce?** A consistent licensee and CoC holder approach to addressing this issue, and a stable, predictable inspection protocol will allow this fuel to be placed into dry storage and ultimately transported without compliance or safety issues arising during or after fuel loading. The ability to load this older-vintage fuel into dry storage provides ALARA benefits by reducing dose for loading campaigns.

III. Success Criteria (Describe the criteria to be used to define success for resolving this issue. Use continuation sheet as required.)

1. Industry documents a generic protocol with which NRC formally concurs regarding how to classify SCC-susceptible fuel for storage and transportation and whether, and to what extent post-reactor operation structural modifications to the fuel need to be licensed as authorized content.
2. NRC develops inspection guidance and staff review guidance consistent with the agreed-upon protocol.

POC: Are all screening criteria satisfied? Yes _____ No _____

IV. Concurrence (Issues accepted for evaluation require concurrence by NEI and NRC)

For Industry: _____
Print/Sign _____ Date _____

For NRC: _____
Print/Sign _____ Date _____

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V. Closeout (Summarize the reason for rejecting the issue or the satisfaction of the success criteria and the process(es) to be used to resolve the issue)

Closeout Summary

DRAFT

Print/Sign

Date