



National Spent Nuclear Fuel Program

# ***Summary and Conclusions***

**NRC Transportation Meeting  
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*Providing for safe,  
efficient transportation of  
DOE spent nuclear fuel*

# ***Criticality Safety Approach for DOE SNF***

- *Canisters will remain leaktight during normal and hypothetical accident conditions.*
- *In the absence of moderator intrusion into the canister, criticality is not credible.*

# ***Crediting Canister Performance ...***

- *Assures criticality safety*
  - *Large margins of safety exist for unflooded canisters even with worst case reconfiguration and full water reflection (i.e. cask cavity flooded)*
- *Increases radiological safety*
  - *By relying on engineered and tested safety features rather than on fuel properties that may have relatively large margins of uncertainty.*
  - *By eliminating the need for detailed SNF characterization.*

# ***NRC Review and Approval Would Enable .....***

- *Fuel repackaging to be done “right” the first time.*
  - *Fuel need be handled/repackaged only once because the canister would be accepted for all future life-cycle phases.*
  - *If needed, canister design and/or operations can be modified prior to fabrication and loading.*

# ***Pathforward .....***

- *Keep the dialog open*
- *Focused technical meetings*
- *Submittal of Topical Report*

# *Meeting Agenda*

- 10:00 a.m.      Introductions
- 10:10 a.m.      Meeting Objectives
- 10:30 a.m.      DOE-EM SNF Canister Integrity
- 11:00 a.m.      DOE-EM Canister Criticality Safety
- 11:15 a.m.      Summary and Conclusions
- 11:30 a.m.      Staff Feedback**
- 11:45 a.m.      Public Comments
- 12:00 p.m.      Adjourn

