Emerging Spent Fuel Management Issues Panel: Consolidated Interim Storage
Consolidated Interim Storage: Industry Benefits

• Availability of a permanent geological repository is projected to take decades and faces significant local and state acceptance challenges

• Availability of consolidated storage facility offers flexibility for DOE to take title to and efficiently manage UNF

• Successful demonstration of transportation, licensing, and public consent processes will increase public confidence in the nuclear industry
  – Public is concerned over “stranded” UNF at decommissioned sites
  – Polls show the unresolved UNF management issue remains a vulnerability for the nuclear industry

Provides a Way Forward to Deliver a Near-Term, Economically Viable Option for Consolidated Interim Used Fuel Management while a Permanent Disposal Solution Continues to be Developed
CIS Consistent with Blue Ribbon Commission Recommendations

- The Blue Ribbon Commission’s report in 2012 recommended a consent-based CISF.
- Allows the federal government (DOE) to take title to UNF and remove it from nuclear power plants (“stranded” fuel at shut-down plants should be a priority).
- WCS proposed CISF is an “outside the beltway” idea that requires no federal funding to start.
Drives Progress Toward a Permanent Repository Solution

• The WCS CISF does not compete against a permanent repository
  – Over 70,000 MTHM generated to date
  – WCS CISF only licensing 40,000 MTHM
  – Still need a permanent solution for the industry

• Allows transportation system to be developed and demonstrated

• Easier to prepare fuel for final repository disposal at an active CISF instead of a shutdown site

CIS is a Complement to rather than a Competitor against Permanent Geological Disposal
• Consolidation of multiple “stranded” ISFSIs into one CISF will save licensing, aging management, and security costs and allow for re-use of decommissioned reactor sites

• Federal expenditures for transportation and storage will result in progress instead of just studies

• Opportunity to reduce taxpayer liabilities and payments owed from DOE’s partial breach of contracts with UNF title-holders
• Need legislation enabling the DOE to take title to UNF and utilize portions of the Nuclear Waste Fund to pay for interim storage services
  – WCS is willing to start the licensing process with no federal funding, but will need certainty of funding for construction and operation
  – Requisite authorities are under active consideration by the Congress
    • H.R. 3643 (introduced by Rep. Michael Conaway [R-TX-11])
    • Senate and House authorizing and appropriations committees
  – CIS capabilities need to be viewed as key element of a well-designed, comprehensive UNF management program
    • System-wide benefits and flexibilities help advance a geologic disposal program, and should be understood in that context
Major DOE initiative on transportation of UNF required to facilitate storage commencing in December 2020

- Development/procurement of transportation assets (i.e., rail cars, transportation casks & supporting equipment)
- Establish Acceptance Priority Ranking (priority to S/D plants, “O-F-F”)
- Assess/Upgrade site infrastructure to support UNF transportation
- Establish and prepare transportation routes and provide funds and technical assistance to provide training to local governments on safety and emergency response (NWPA Sec. 180(c) requirements)

Managing public acceptance of large scale transportation of UNF

- “Stop Fukushima Freeways” campaign recently launched by groups opposing Yucca Mountain
- Statistically, transporting UNF is one of the safest activities in the nuclear fuel cycle
- Proactive approach needed to address public fears and concerns
What is Needed to Help CIS Move Forward?

• Industry support for development of interim storage capability and supporting transportation infrastructure
  – Engage in development of supportive industry policy positions
  – Engage Congressional stakeholders to advance meaningful UNF management policy and enable opportunities for private storage solutions
  – Support development and deployment of necessary UNF transportation infrastructure
Summary

• CIS is an integral part of a country’s overall successful used fuel management system

• Significant near-term financial benefits available through consolidation of multiple “stranded” ISFSIs into one CISF

• A complement to and not a competitor against a permanent geological repository

• Major challenges include:
  – Enabling legislation to provide project certainty
  – Transportation infrastructure to support operations in 2020
  – Public acceptance of large scale transportation of UNF

• Proactive support from industry stakeholders needed to help make progress