



AMERICA'S NUCLEAR SOLUTION

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Emerging Spent Fuel Management Issues Panel:
Consolidated Interim Storage



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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



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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



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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



Summary of CIS Benefits

- 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



Industry Issues & Challenges for CIS (1 of 2)

- 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



Industry Issues & Key Challenges for CIS (2 of 2)

- 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



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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