

U.S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

**NUCLEAR WASTE TECHNICAL REVIEW BOARD
FULL BOARD MEETING**

**SUBJECT: NEW DIRECTIONS IN WASTE
ACCEPTANCE, STORAGE, AND
TRANSPORTATION**

PRESENTER: DWIGHT E. SHELOR

**PRESENTER'S TITLE
AND ORGANIZATION: DEPUTY DIRECTOR
OFFICE OF WASTE ACCEPTANCE, STORAGE AND TRANSPORTATION
WASHINGTON, D.C.**

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**AUSTIN, TEXAS
APRIL 30 - May 1, 1996**

Purpose

- **Current Situation**
- **Strategic Objectives**
- **Transportation Planning**
- **Interim Storage Planning**
- **Non-Site Specific Activities**

Current Situation

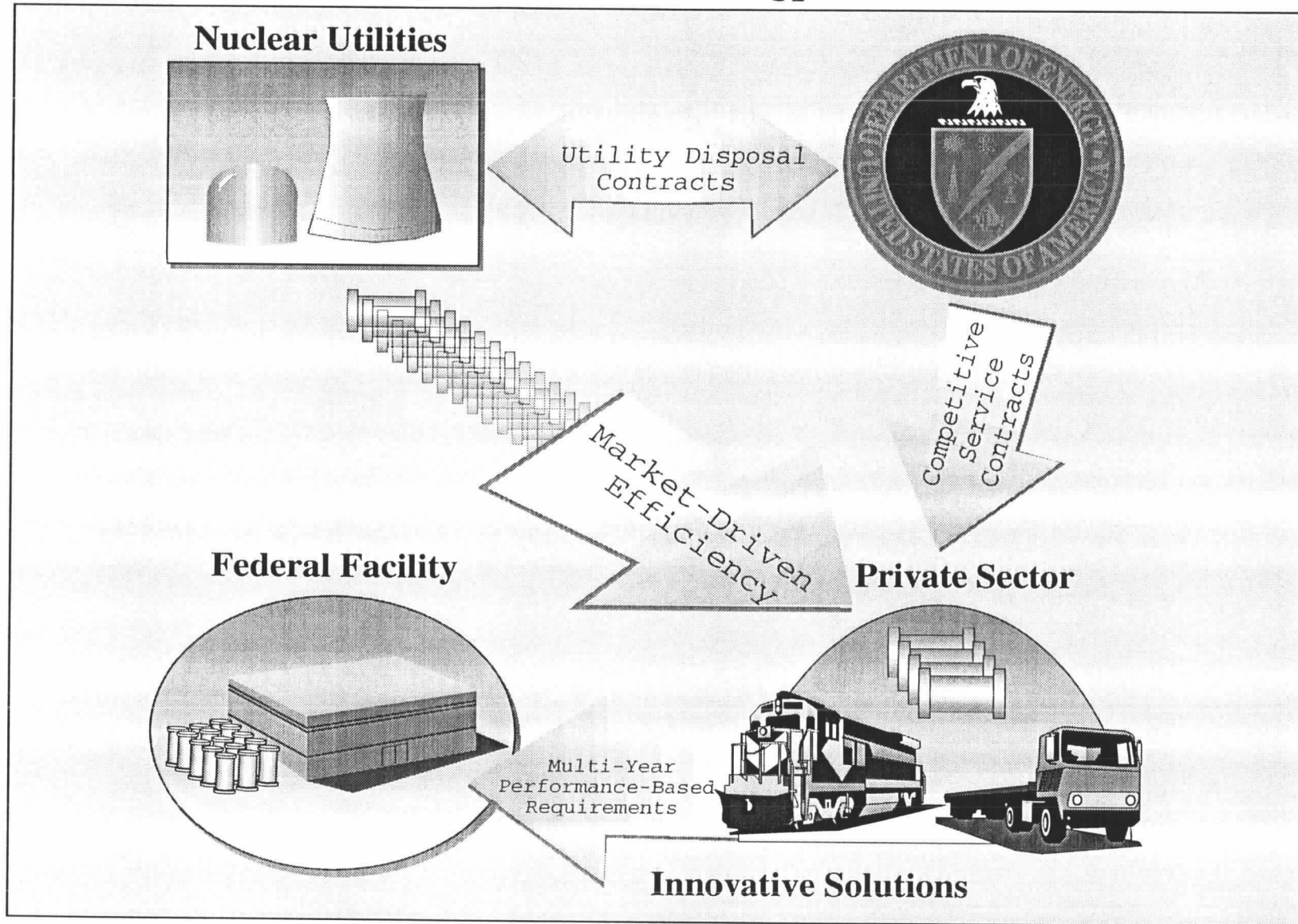
- **Administration position**
 - **Interim storage site will be considered following repository viability assessment**
- **Congressional actions**
 - **S-1271 awaiting Senate floor vote**
 - **HR-1020 awaiting House floor vote**
 - **FY-1996 appropriations sequestered \$85 million for interim storage**

OWAST Strategy

- **First Stage (contingency planning)**
 - undertake activities that have potential to expedite start of interim storage
- **Second Stage (if authorized)**
 - procure waste acceptance, storage and transportation equipment and services
 - design and license an interim storage facility (when sited)

*assumes
Int. Storage
directive for
99*

Market-Driven Waste Acceptance, Storage, and Transportation Strategy



Transportation Planning

- **Objectives**
 - **Practical and implementable**
 - **Maximum use of private industry**
 - **Incentives for innovation**
 - **Minimize DOE involvement**
 - **Utility cooperation and participation**
 - **Performance based contracts**

Transportation Planning

- **Scope of services**
 - **Service all Purchasers per the Annual Capacity Report**
 - **Provide transportation casks and equipment suitable for use at Purchaser's sites**
 - **Transport and store SNF according to**
 - **applicable NRC and DOT regulations**
 - **standard commercial practices**

Transportation Planning

- **Scope of services (continued)**
 - **Accept spent fuel as agent of DOE**
 - **Provide compatible storage systems for use at the federal facility (if fuel is to be placed in interim storage)**
 - **Perform route selection in coordination with state, Indian tribes, and local governments**
 - **Perform intermodal transport as necessary**

Transportation Planning

- **Multiple awards**
 - **First of several procurements over several decades.**
 - **Multiple awards to competing contractors to establish and sustain viable competition**
 - **Divide country into regions with one contractor providing services to all utilities in that region.**
 - **No single offerer awarded more than a fixed maximum number of regions.**

Transportation Planning

- **Contract type**
 - **Fixed-price type, performance-based, service contracts.**
 - **Incentives and flexibility to**
 - **improve efficiency,**
 - **solve problems,**
 - **overcome obstacles**
 - **provide low cost services.**
 - **Innovative arrangements will be encouraged.**
 - **reduce DOE risk**
 - **lower costs**

Transportation Planning

- **Contract term - five to ten years**
 - **Several years for preparation of services**
 - procurement of transportation and storage equipment
 - achieve operational readiness
 - ISF licensing and construction.
 - **Multi year service period**
 - complete waste acceptance and transportation services.
 - improve efficiency of operations and reduce costs through campaigning of fuel pickups

Transportation Planning

- **Expressions of Interest / CBD announcement**
 - **Public solicitation of Expressions of Interest (EOI)**
 - **Potential offerors**
 - **Utilities**
 - **Obtain comments on the acquisition of waste acceptance and transportation services**
 - **Pre-solicitation conference**

Interim Storage

- **Tied to repository viability assessment**
- **First Stage - non-site specific activities**
 - **FY-1996 through FY-1998**
 - **Phased development**
- **Second Stage - site-specific activities**
 - **after viability assessment and legislation to designate an interim storage site**

Interim Storage

- **Phased approach to interim storage**
- **Phase 1 - canistered SNF only**
 - simple facility to enhance ease of licensing
 - simple facility to shorten construction duration
 - based on existing designs
 - consistent with proposed legislation
 - compatible with transportation planning

Interim Storage

- **Phased approach to interim storage**
 - **Phase 2 - uncanistered SNF**
 - **more complex facility**
 - **available approximately two years after initial SNF receipt**
 - **consistent with proposed legislation**
 - **compatible with transportation planning**
 - **transition from canistered SNF to uncanistered SNF**

Non-Site Specific Activities

- **TSAR (Topical Safety Analysis Report)**
- **Potential Benefits**
 - **Early issue identification and resolution**
 - **Increased confidence in licensing schedule**
 - **Reduce NRC license review duration**
 - **Shorten duration of environmental data gathering**

Non-Site Specific Activities

- **Issues to be addressed in TSAR (Phase 1)**
 - Long-term dry storage of SNF
 - Seismic requirements
 - Off-Normal recovery
 - Design Basis Accidents
- **Issues to be addressed in TSAR (Phase 2)**
 - Dry uncanistered fuel assembly handling

Non-Site Specific Activities

- **TSAR**
 - **Follow Reg. Guide 3.48**
 - **Bounding parameters and environmental parameters**
 - **Submit TSAR to NRC prior to site identification**
 - **NRC prepares Safety Evaluation Report (SER)**

Integration of Activities

- **Waste acceptance and transportation activities are fully integrated with interim storage contingency planning consistent with Administration's position**
- **Near-term TSAR activities will position DOE to respond rapidly, if necessary**
- **Funding allocation keeps emphasis on repository**