Spent Nuclear Fuel
High Level Radioactive Waste

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NWPA of 1982

- DOE to Develop Repository
- 2 Repositories to be Developed
- Fuel Receipt to Begin 1/1/1998
- DOE to Study MRS Feasibility
- Utility Financed
NWPAA of 1989

- Develop Only One Repository
- Study Yucca Mountain, Nevada
- Build MRS, Use Negotiator to Site
- Still Utility Financed
<table>
<thead>
<tr>
<th>YEAR</th>
<th>REPOSITORY START DATE</th>
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<tr>
<td>1985</td>
<td>1998</td>
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<td>1987</td>
<td>2003</td>
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<td>1989</td>
<td>2010</td>
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COOK OBLIGATION to NWPA

- Ongoing 1 mill/kwhr Fee
  - Annually $10 to $13 million
  - To Date $101 million
- Pre-1983 One-time Fee
  - Principal $72 million
  - Interest $70 million
Total $142 million
MRS PROGRESS

• No Site Selected
  • 8 Regions Accepted $100,000 to Study Feasibility
  • MRS Cannot Accept Fuel Until Repository Construction Started
  • DOE Unlikely to Receive Fuel in 1998
MRS - AEP POSITION

- Diversion of DOE Priority
- Further Government Delay
- Higher Utility Costs with MRS
- Subsidizes Utilities with Near Term Needs
- Redundancy Not Required
NEW DOE STRATEGY

- Standardized Container System
- Terminate MRS Work
- Interim Storage at Federal Sites
- Recommendation to Take Nuclear Waste Fund Off Budget
- Potential Compensation of Utility Onsite Storage
NEW DOE STRATEGY - AEP POSITION

- Good Ideas:
  - Standardized Containers
  - Taking NWF Off Budget
  - Termination of MRS Work

- Bad Ideas:
  - Interim Storage at Federal Sites
  - Potential Utility Compensation

- Strategy May Change Again with New Administration
COOK NUCLEAR PLANT

Spent Nuclear Fuel Storage
COOK NUCLEAR PLANT
SPENT FUEL STORAGE
PROJECTION THROUGH 2018

Assumes DOE Does Not Perform
STORAGE OPTIONS

- Dry Cask or Vault
- Consolidation
- Rerack
DRY CASK or VAULT

- Licensed and Used at Various Plants
- Most Expensive at $20,000 per Assembly
CONSOLIDATION

- Licensed and Demonstrated
- Rerack Necessary to Consolidate
- Not Yet Economical or Practical
RERACK

- Common Practice
- 10.5" Spacing to 9" Spacing
- Least Costly

($8,250 per Assembly)
SPENT FUEL POOL RERACK PROJECT SCHEDULE

- AWARD CONTRACT
- GATHER DATA
- START ANALYSIS
- SUBMIT LICENSING REPORT
- START FABRICATION
- LICENSE PENDING
- RECEIVE RACKS

COMPLETE INSTALLATION