EXPERIENCES FROM PLANNING AN INTERIM ON-SITE SPENT FUEL STORAGE FACILITY AT RANCHO SECO NUCLEAR GENERATION STATION

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SACRAMENTO MUNICIPAL UTILITY DISTRICT

NUCLEAR WASTE TECHNICAL REVIEW BOARD

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Objective: To Provide A Discussion Of Institutional Issues As They Relate To Interim On-Site Spent Fuel Storage At A Decommissioning Reactor, Such As Rancho Seco

- o Factors Impacting Decommissioning
- o Spent Fuel Storage/Disposition Strategy
- o Economics of On-Site Spent Fuel Storage
- o Environmental Activities
- o Future Developments

FACTORS IMPACTING PLANT DECOMMISSIONING

o Decommissioning Issues

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- Available Funds

- Low Level Radioactive Waste Disposition

- Spent Fuel Disposition

o Spent Fuel Storage Issues

- Extended Fuel Pool Storage
- Dry Storage Capital Investment
- Storage After Plant Decommissioning
- Mitigation Of "Off-Normal" Conditions After Fuel Pool/Plant Decommissioning

SPENT FUEL STORAGE / DISPOSITION STRATEGY

o Options Explored

- Continued Storage In Spent Fuel Pool
- Dry Cask Storage
- Shipment To Federal Repository
- Reprocessing
- Storage At Another Utility

o On-Site Dry Cask Storage Determined Most Effective

SCHEDULE

o Decommissioning And Spent Fuel Storage/Disposition

- Custodial-SAFSTOR Until Spent Fuel Stored In Dry Casks, About 1998

- Hardened-SAFSTOR Until 2008

- DECON Between 2008 and 2011

- Spent Fuel Acceptance 2001 to 2015

ECONOMICS OF DRY CASK STORAGE

- o Cost Of ISFSI/Transportable Storage Cask System
 - Capital Investment: \$16.0 Million

o Estimated Savings From Dry Cask Storage

- Annual Cost Of Pool Storage: \$10.6 Million

- Annual Cost Of Dry Storage: \$2.6 Million

- Total Saving During SAFSTOR: \$64.0 Million, Minimum

ENVIRONMENTAL ACTIVITIES

o California Environmental Quality Act (CEQA)

- No Significant Impacts

- Negative Declaration

o National Environmental Policy Act (NEPA)

- No Significant Impacts

- Challenge To NRC's Environmental Report May Result In Public Hearings

o Public Meetings/Hearings

- Three Public Meetings

- Two Public Hearings

o Public Participation Minimal

- No Significant Issues

FUTURE DEVELOPMENTS

o Rancho Seco Site Park Upgrades

- Golf Course/Clubhouse
- Equestrian Center
- Nature Center

- Hiking and Riding Trails

- Camping/Group Use Area

o Generating Plant Developments

- Solar Thermal

- Gas Options

CONCLUSION

o Interim On-Site Dry Spent Fuel Storage, Although Costly, Is The Most Effective Method For Rancho Seco And Does Not Appear To Be A Major Local Concern Or A Factor In Future Site Development.