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United States Nuclear Regulatory Commission

Protecting People and the Environment

A Historical Perspective of the NRC and Reprocessing

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Fuel Cycle Information Exchange
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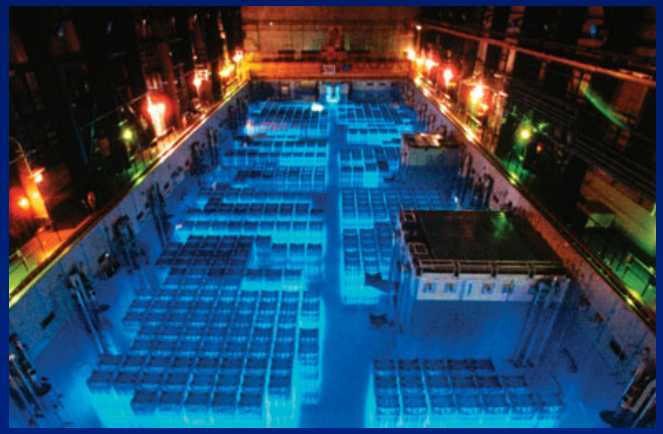
Overview

- How reprocessing was initiated
- Timeline of events
  - West Valley, New York
  - Morris, Illinois
  - Barnwell, South Carolina
- Lessons Learned
- Questions & Answers



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The Beginning

- Atomic Energy Commission
  - Released reprocessing technology in 1956
  - Regulated under 10 CFR Part 50
  - Two-step licensing process
- "Atomic Energy Plan for the State of New York"
  - Deemed reprocessing viable commercial activity

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1960s

1960 1961 1962 1963 1964 1965 1966 1967 1968 1969

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1960s

AEC receives construction application from NFS for West Valley

AEC issues construction permit for West Valley

AEC issues operating license for West Valley

1960 1961 1962 1963 1964 1965 1966 1967 1968 1969

AEC receives construction application from GE for Midwest Fuel Recovery Plant near Morris, IL

AEC issues construction permit for Midwest

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1960s

1960 1961 1962 1963 1964 196

AEC receives construction application from Allied-General Nuclear Services for a large-scale facility near Barnwell, SC

1969

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1970s

1970 1971 1972 1973 1974 1975 1976 1977 1978 1979

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1970s

NEPA

NFS closes West Valley to expand facility

AEC issues draft Generic Environmental Impact Statement on Mixed Oxide (GESMO)

1970 1971 1972 1973 1974 1975 1976 1977 1978 1979

AEC grants construction permit for Barnwell

"Midwest Fuel Recovery Plant Technical Study Report" results in licensing for possession only

NFS deems West Valley upgrades impractical

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1970s

National Policy

Commission issues policy statement ending reprocessing

1970 1971 1972 1973 1974 1975 1976 1977 1978 1979

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1980s

1980 1981

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1980s

Congress passes "West Valley Demonstration Project Act"

President Reagan lifts ban on reprocessing

1980 1981

Nuclear Fuel Services, Inc. lease on West Valley expires

Allied-General Nuclear Services halts Barnwell Project

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Lessons Learned

- Adequate remote operations and maintenance technology
- Regulatory stability
- Financial commitments
- Comprehensive decontamination & decommissioning plans
- National policy continuity
- Regulatory gaps
- Commercial reprocessing continues

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Questions?