



Yankee Atomic Electric Company Update of D&D Approach

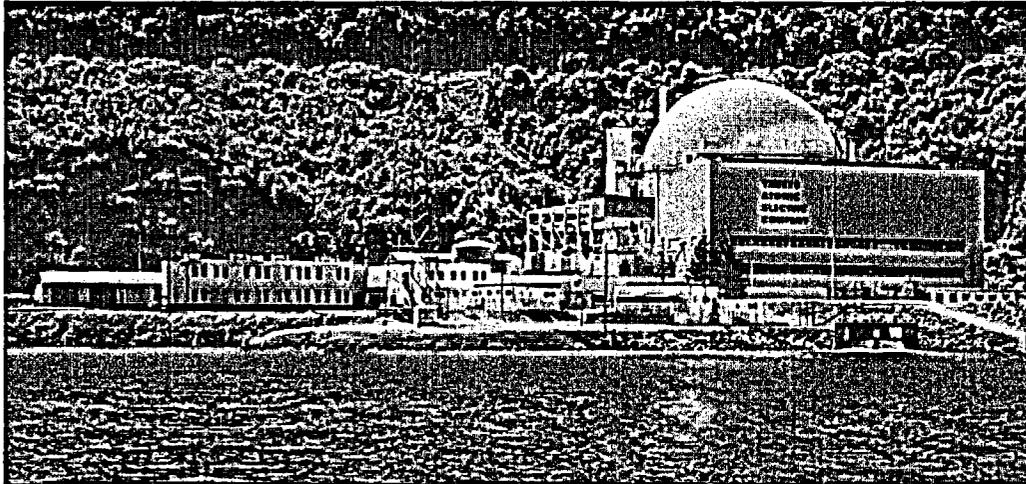
Meeting with USNRC
June 17, 2004

Introductions

Discussion Topics

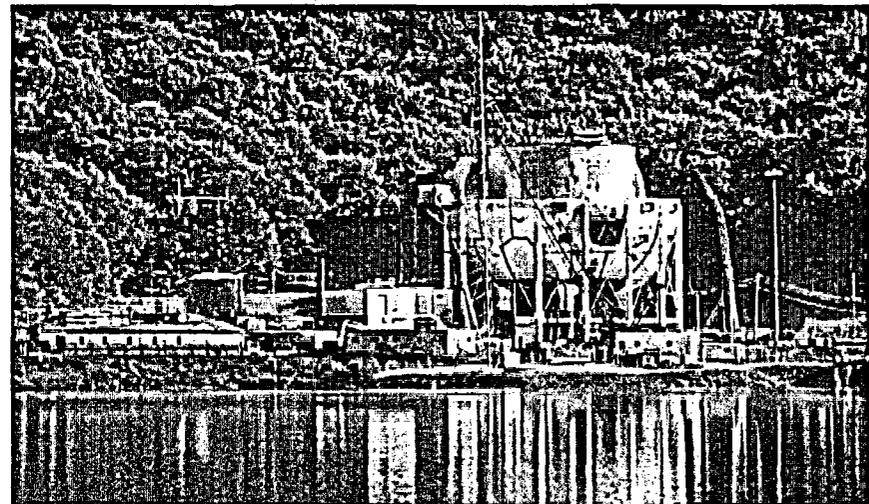
- Decommissioning Progress
- Revision of Materials Management Approach
- Events Leading to Change in Approach
- Summary of Approach
- Dose Modeling Efforts
- Anticipated LTP Changes
- Future Discussions with NRC

Decommissioning Progress



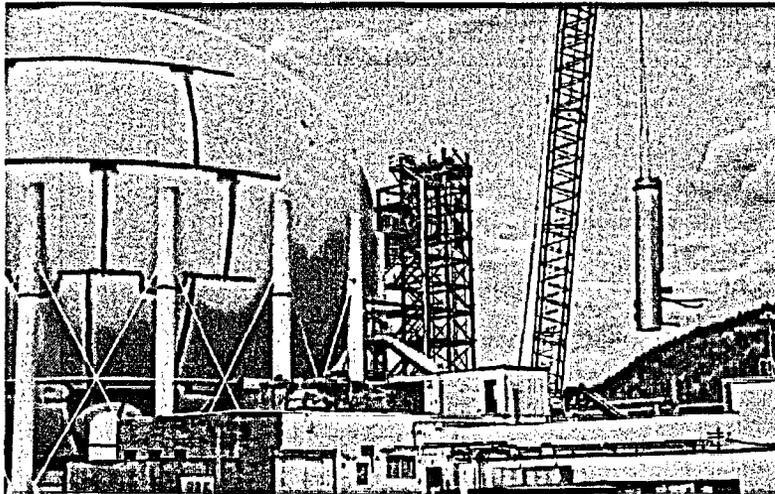
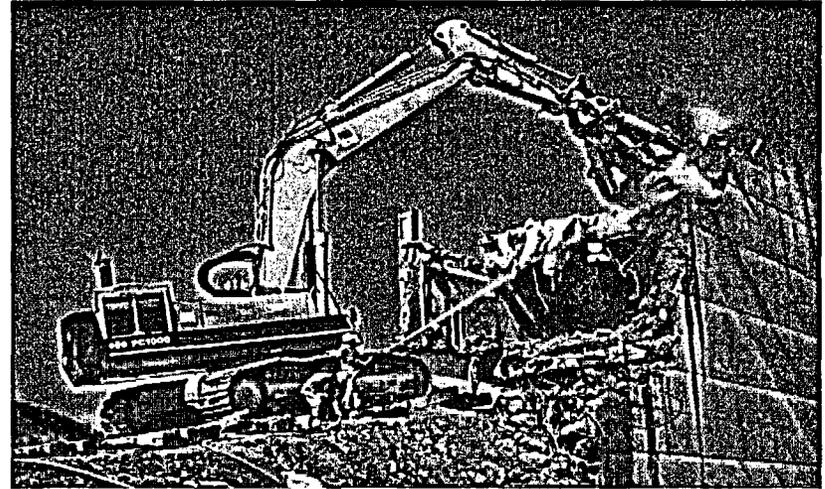
During
Operations

Currently



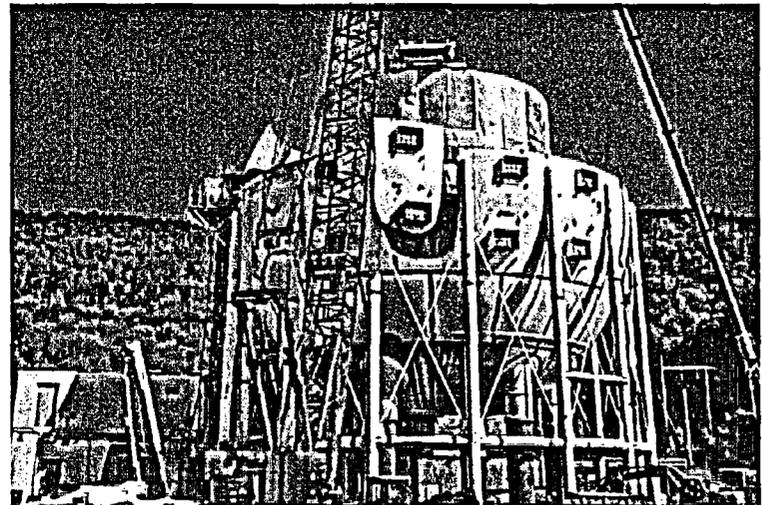
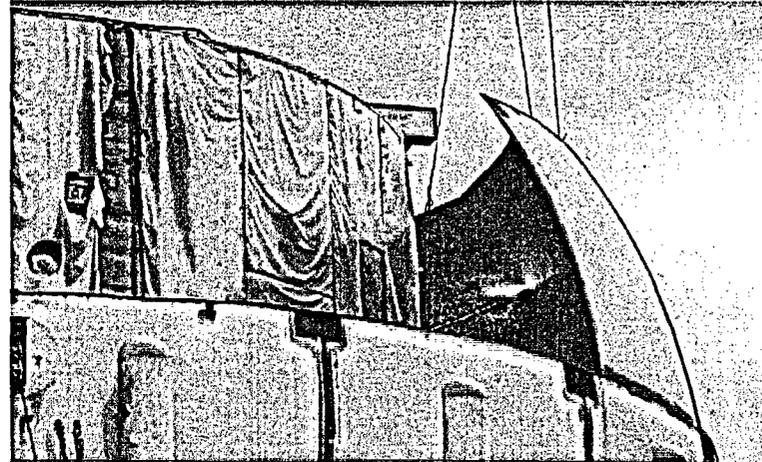
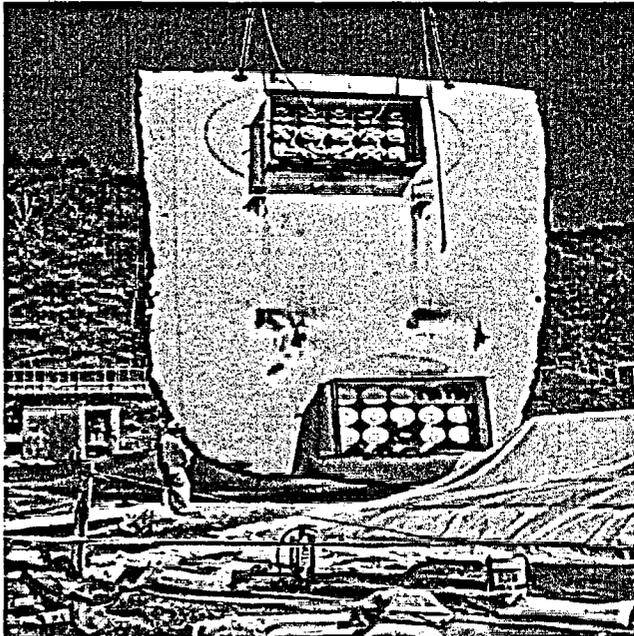
Decommissioning Progress (Cont'd)

- Building Demolition
 - Turbine Building
 - Waste Warehouse
 - Safe Shutdown Building
 - Fuel Transfer Enclosure
 - Plant Vent Stack
 - Service Building



Decommissioning Progress (Cont'd)

- Cutting of the Metal Vapor Container



Revision of Materials Management Approach

- Up to Now Plans to Ship Entire RCA
- Looking at Past Performance, Concerns Have Arisen From Recent Events
- Investigating Ways of Reducing the Number of Shipments Offsite and the Distance Traveled by Those Shipments

Events Leading to Change

- **Over 2100 Truckloads of Waste Remaining**
 - Assumes that only partial building basements and slabs remain
 - Some additional fill dirt to be brought in
- **Two Truck Incidents**
 - Truck lost load
 - Empty truck involved in accident

Summary of Approach

- Vapor Containment (VC) Steel
- Primary Auxiliary Building (PAB)
- Reactor Support Structure (RSS)
- Building Slabs
- Asphalt
- Soil
- Spent Fuel Pit (SFP)

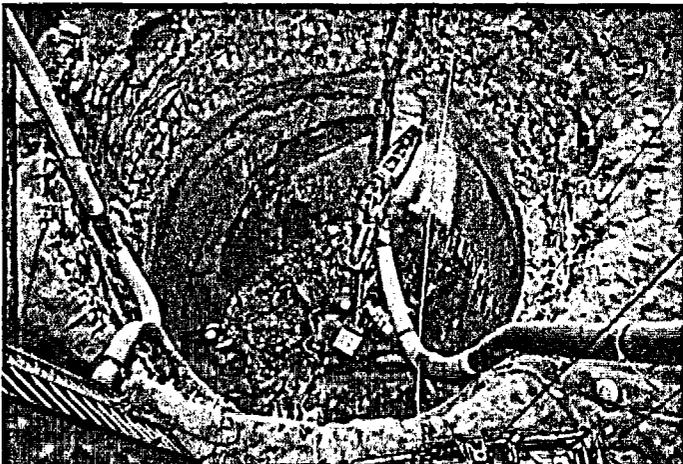
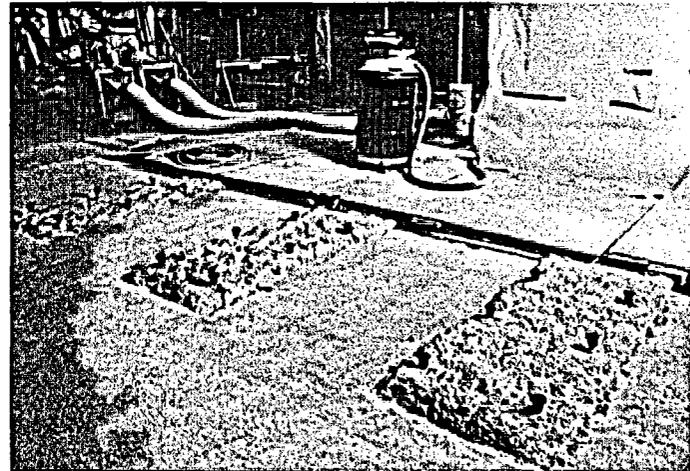
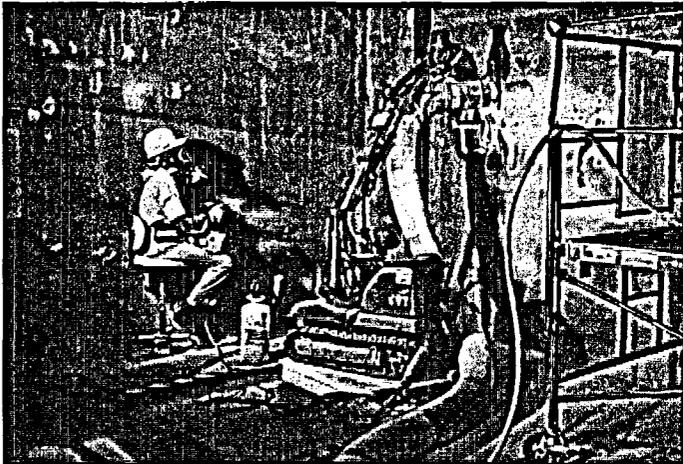
VC Steel

- Puncture Risk During Transport
- Damage to Inter-Modal During Dumping
- Reduced Transportation Risk to a Recycler
- PCB Paint Removal
- Free Release Following Decontamination in Accordance with IEC 81-07 and Aggregate Guidance

Primary Auxiliary Building and Reactor Support Structure

- Combination of Free Release and <DCGL Based upon Structural Surveys for Concrete and Steel
- Release Rebar to Recycler
- Concrete Stays on Site (Exception >DCGL)
- DCGL Confirmation of Aggregate with Truck Gamma Spectroscopy System

Current Status of PAB and RSS



Building Slabs and Asphalt

- Survey in Place
- <DCGL Concrete to be Kept on Site
- Free Released Asphalt to be Kept on Site
- >DCGL and Hazardous Material Contamination Shipped Off Site
 - Rad to Envirocare
 - Non-Rad to approved landfill (aggregate survey using truck gamma spectroscopy system)

Soil

- < DCGL Remains on Site
- > DCGL Shipped to Licensed Disposal Facility
- Hazardous Material Contaminated
 - Rad to Licensed Disposal Facility
 - Non-Rad to approved landfill (aggregate survey using truck gamma spectroscopy system)

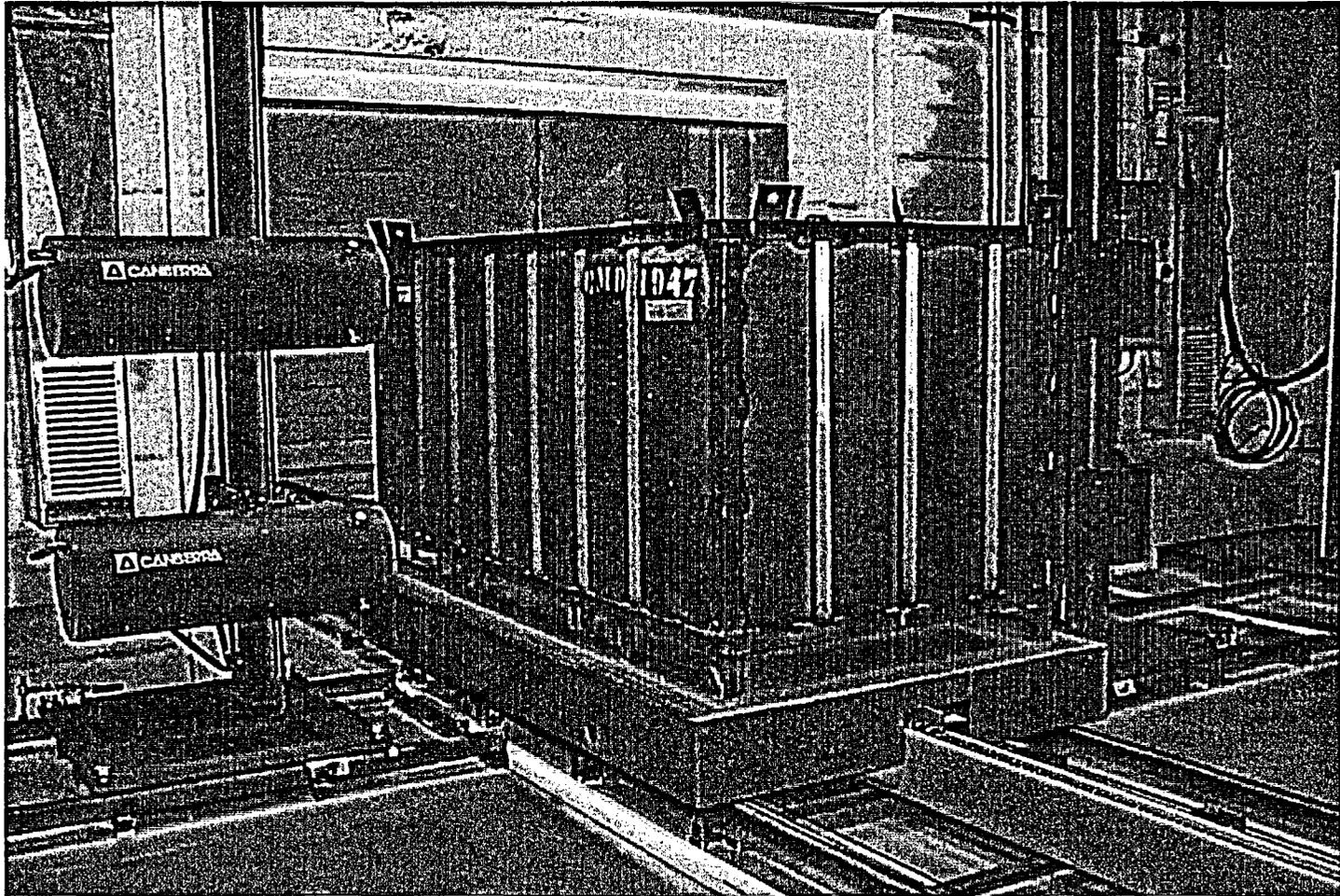
Spent Fuel Pit/Ion Exchange Pit

- Plan Generally to Remove SFP/IX Pit as Waste
- Based upon:
 - Existence of liner
 - Levels in underlying concrete
 - Potential for contaminated cracks
 - Anticipated material that can be kept on site

Results

- Reduces Number of Shipments by >1000
- Reduces Amount of Fill Required
- Reduces Shipment Distance for Free-Released Steel
- Reduces Risk from Shipment of VC Steel
- Net Cost Savings in Burial and Transportation

Truck Gamma Spectroscopy System



Dose Modeling Approach

- Investigate Parallel Approaches for Below-Grade Concrete Debris
 1. CY approach to water transport model
 2. Discuss with BNL the use of site hydro-geological conditions to model diffusion/dilution from debris
- New Resident Farmer Scenario Using Concrete Debris to Grade/Contour Site
- Use Conservative Approach for Aggregate Concrete DCGL Determination

Anticipated LTP Changes

- Section 2
 - Additional survey areas
 - Section 3
 - Changes to LLW amounts
 - Additional decommissioning activities
 - Section 5
 - Method for performing FSS on debris
 - Methods for combining doses
 - Section 6
 - Determination of DCGLs for concrete debris
 - Section 8
 - Changes to LLW amounts
 - Environmental impacts of beneficial use of concrete debris
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Current Status of Activities

- Developing Concrete Debris DCGLs
- Identifying Specific Text Impacted
- Evaluating the Impact on RAI Responses
- Target for Submitting Concrete Debris DCGLs—August 2004

Future Communications with NRC

- Schedule Discussions
- Periodic Calls
- Regular Meetings