



Yankee Atomic Electric Company HSA and Classification

Meeting with the USNRC
March 4, 2003

Agenda

- Introduction van Noordennen
- Purpose of the Meeting van Noordennen
- YNPS History and Past Activities Heath
- HSA/Classification Approach Moon/Darois
- DQOs/DQAs Identified Moon/Darois
- Process for MARRSIM Classification Moon/Darois
- Data Collection Process & Available Sources Moon/Darois
- Documentation in LTP Section 2 Moon/Darois
- Future Meeting Topics/Dates van Noordennen
- Meeting Summary/Action Items van Noordennen

Purpose of Meeting

- Outline Process Being Applied to Site Classification
- Review Past Decommissioning Survey Activities Used for Characterization
- Describe Current HSA Approach
- Describe the Information to Be Included in the LTP
- Obtain NRC Feedback

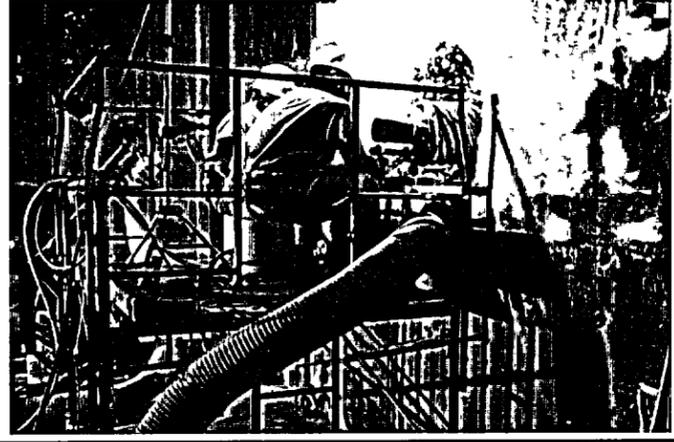
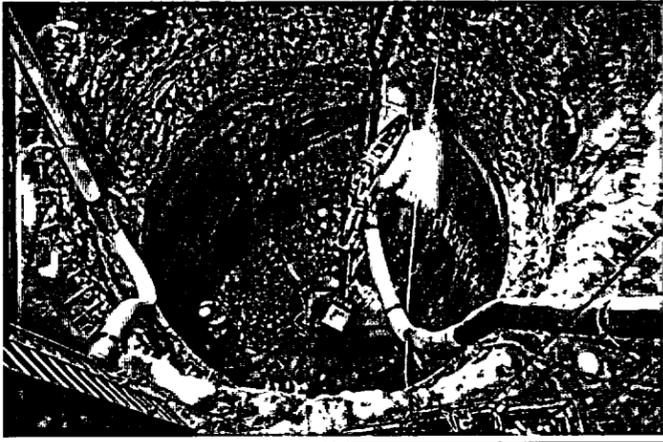
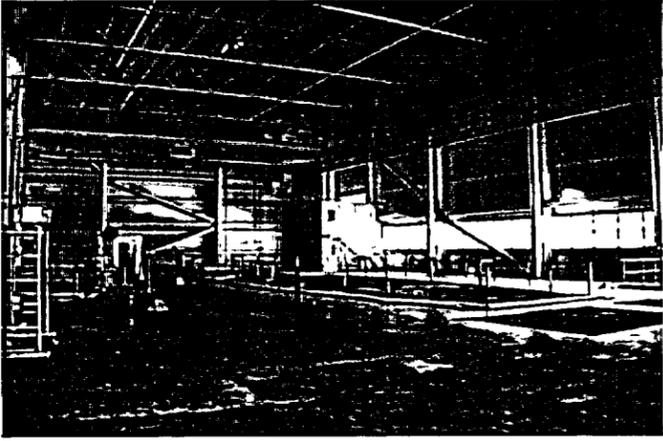
YNPS History

- Achieved Initial Criticality—1960
- Began Commercial Operation—1961
- Upgrade to 600 MWt—1963
- Decision to Cease Operations—2/1992
- Possession Only Status—8/1992
- Decommissioning Activities—1992-present
- Fuel Movement to ISFSI (Began)—6/2002

Past Decommissioning Activities

- Large Components Removed
- Majority of SSCs Disposed of Off-Site
- Significant Remediation and Survey Activities Performed Under Previously Submitted LTP
- Surveys Conducted Based Upon Guidance in:
 - RG 1.86
 - Draft NUREG/CR-5849
 - Draft NUREG-1500

Past Decommissioning Activities (Con't)



Status At Conclusion of Current Decommissioning Phase

- Most Structures Demolished to Grade
 - VC Removed—Rad Waste Disposal
 - Remaining Structures:
 - PAB Cubicle Corridor
 - SFP/IX Pit
 - Building Pads: Turbine, Waste Disposal, Service, Warehouse Building, and VC
 - Shoreline Structures, Training Center, Information Center
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HSA/Classification Approach

- Use MARRSIM Process, Including DQO/DQA Processes
- Catalog/Evaluate Available Data Sources
- Proceduralize Classification Process Based Upon HSA Data
- Delineate Areas With Common History/Operational Impact
- Consider Impacts of Continuing Decommissioning Activities

DQOs/DQAs Identified

- Team Development
- Identification, Collection and Organization Of HSA Data
- Evaluation of HSA Data

DQO: Identification, Collection and Organization Of HSA Data

- Develop Method and Define Process
- Use Standardized Format for Data Presentation
- Collect Data from All Identified Categories for All Site Areas
- Develop Checklist for Consistent HSA Data Collection

DQA: Evaluation of HSA Data

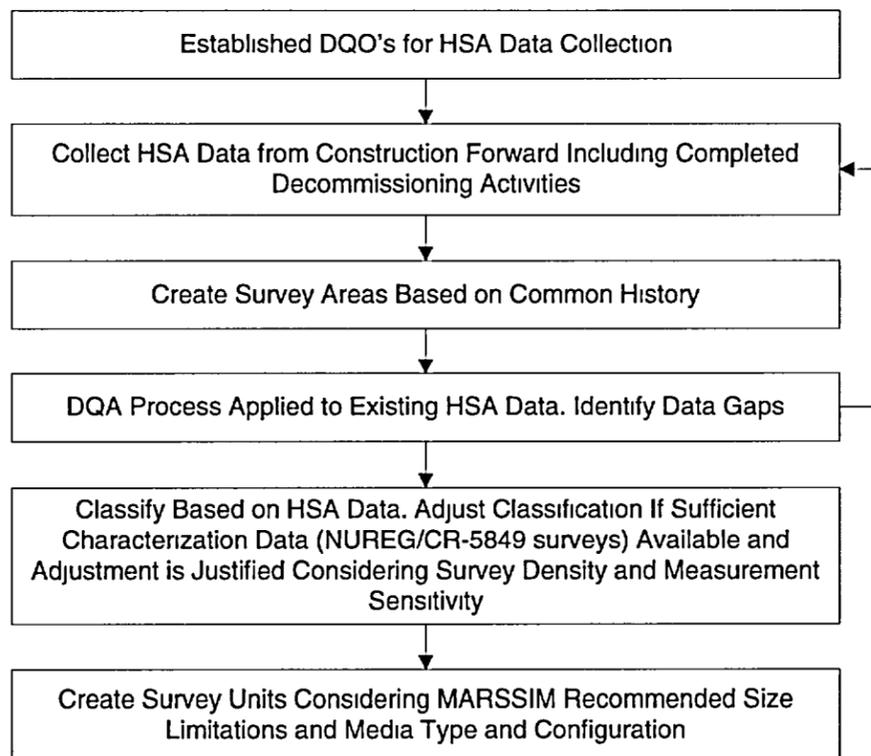
- Defines Data Quality Assessment Process
- Develop Technical Basis Document for Quality
- Develop Quality Standard
- Evaluate Data Against Quality Standard
- Document Review of Data Quality

MARSSIM

Graded Approach for Classification

- Non-Impacted Areas
- Impacted Areas
 - Class 1
 - Class 2
 - Class 3

Process for Classification



Basis for Classification

- Proceduralized Process
- Classification Based Upon HSA Data
- Classification Based on Survey Data Collected Under NUREG/CR-5849
 - Justifies less restrictive classification
 - High measurement density
 - High quality measurements

HSA Data Collection Process

- Steps Included:
 - Consideration of Site History (Construction Through Current State of Decommissioning)
 - Evaluation of Historical Processes
 - Review of Plant Modifications
 - Evaluation of Original Site Construction Photos and P&IDs
 - Review of Event Reports/Memos and Technical Basis Reports
 - Evaluation of Radionuclide Mixture in Area
 - Evaluation of Impacts of Ongoing Decommissioning Activities
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Available Data Sources

- Decommission Plan
 - Event reports
 - Maps
 - Characterization Data/Decommissioning Surveys
 - 1993 to present
 - Includes surveys conducted under NUREG/CR-5849
 - Interviews/Supervisor Logs/Night Orders
 - Information Catalog:
 - > 400 site references,
 - > 100 former YNSD references
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Examples of Site Construction Photos



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EXCAVATION FOR WASTE CONTAINMENT STRUCTURES



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Documentation in LTP Section 2

- HSA Methodology
- Synopsis of HSA Results
- Maps of the Site and Initial Survey Area/Unit Boundaries
- Initial Classifications for Survey Areas/Units
- Non-Impacted Area Assessment
- Radionuclides Present in Survey Areas

Future Meeting Topics/Target Dates

- Dose Modeling 4/2003
- Final Status Survey 5/2003
- Submittal Mechanics 6/2003

Meeting Summary & Action Items