Status Building 235-F Project

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Purpose

- Provide information regarding ongoing risk reduction activities in the 235-F Facility
- Complete a topic of the Nuclear Materials Workplan
Building 235-F Background

- Building 235-F has had numerous missions over the years, with the most recent being fabrication of Pu-238 in the Plutonium Fuel Form Facility (PuFF) for use in construction of power sources for NASA deep space missions in the 1980’s.
- Residual material in the nine PuFF facility cells was last measured in 2006.
- About 1.5 kilograms of Pu-238 material remain in the cells.
- In a seismically induced full facility fire accident scenario the calculated unmitigated dose is about 11,900 rem onsite and 14.3 rem offsite.
- The building is safely maintained in the surveillance and maintenance mode.
- The project objective is to reduce the unmitigated onsite dose to less than 100 rem by reducing Pu-238 levels in PuFF.
- The facility end state will be determined through an agreement with State Regulators.
Key Accomplishments

- Completed mechanical and electrical isolation of cells 3 - 9
- Removed outer shield windows and cleaned inner windows of cells 1 – 9
- Established cell lighting of cells 1 – 9
- Completed measurements of the amount of material in cells 1 – 9
- Completed window remediation of cell wing cabinets
- Demonstrated use of vacuum in cell 6
Key Plans for FY 2018

- Complete measurements of the amount material in cell wing cabinets and issue final report for PuFF
- Complete mechanical and electrical isolation of cells 1, 2 and cell wing cabinets
- Approve and implement Safety Basis documents needed for work in cells 1 & 2

PuFF Cells 4 & 5: Current State
PuFF Current State

Window remediation complete
Windows requiring remediation
Cells 8 and 9 are complete
Cells 6 and 7 hot mockup
Located on the Savannah River, in Aiken and Barnwell counties in South Carolina.

Chosen for its location, chemistry, land quality, soil characterization, and construction costs.

Questions