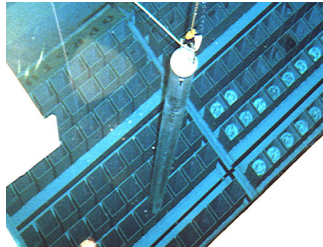




# A Presentation to the Citizens Advisory Board Nuclear Materials Committee



## Nuclear Material Disposition Accomplishments



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# Nuclear Material Program Accomplishments

## Acronyms

**DE – Destructive Examinations**

**DOE – Department of Energy**

**DRR – Domestic Research Reactor**

**DWPF – Defense Waste Processing  
Facility**

**FRR – Foreign Research Reactor**

**HEU – Highly Enriched Uranium  
(>20% U-235)**

**HLW - High Level Waste**

**Kgs - Kilograms**

**LEU – Low Enriched Uranium  
(<20% U-235)**

**MT – Metric Ton**

**NDE – Non-Destructive Examinations**

**NOI – Notice of Intent**

**Pu – Plutonium**

**AROD – Amended Record of  
Decision**

**SEIS – Supplemental Environmental  
Impact Statement**

**SNF – Spent Nuclear Fuel**

**SRNS – Savannah River Nuclear  
Solutions**

**SRS – Savannah River Site**

**TVA – Tennessee Valley Authority**



# Nuclear Material Program Accomplishments

## Plutonium Disposition in HB-Line

- Completed 33 of 34 NDEs and 16 of 18 DEs (Plan to complete all by 9/30/10)
- Plan to disposition a total of approximately 400 kgs Pu thru 2012
- H Area has dissolved over 65 kgs of 3013 Surveillance Material in FY2010
- Pu solution will be sent to DWPF for inclusion in HLW glass
- Issued NOI for Pu Disposition SEIS



# Nuclear Material Program Accomplishments

## Unirradiated HEU Disposition in H-Canyon

- Completing the dissolution of the 5.6 MT unirradiated HEU from offsite by mid-September 2010 (~600 kgs in FY 2010)
- Shipped ~ 18 MT LEU (20 trailers) to TVA and plan to ship an additional ~ 3 MT (4 trailers) by end of September 2010
- Plan to begin SNF processing in H Canyon in September 2010 after approval of the Amended ROD



# Nuclear Material Program Accomplishments

## Spent Nuclear Fuel

- Completing preparations to support shipping of SNF to H Canyon
- Received SNF from Chile as part of the non-proliferation program, the first “non U.S. Origin material”
- Received 13 casks of FRR SNF
- Received 14 casks of DRR SNF



# Nuclear Material Program Accomplishments

## 2009/2010 Infrastructure Upgrades

- **H-Canyon/HB-Line**
  - HB-Line Replacement Dissolvers
  - Refurbishing Canyon Pier Supports
  - Replacement Evaporators
  
- **K-Area**
  - Replaced Roofs
  - Resurfaced Parking Lot
  
- **L-Area**
  - Cask Car (70 ton) Refurbishment



# Nuclear Materials Program Accomplishments

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## H-Canyon Documented Safety Analysis (DSA)

- Upgraded DSA has been approved by DOE
- Being implemented by SRNS to support SNF processing beginning September 2010
- Allows closure of CAB Recommendation # 259

# Nuclear Materials Program Accomplishments

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## Summary

- Demonstrated Safe Storage and Disposition of Pu and HEU Materials
- Plan to initiate processing SNF by end of fiscal year upon approval of the AROD
- Support of Non-Proliferation program by continued receipt of HEU SNF.