



# ***Fiscal Year 2005 Workscope***

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***Providing for safe,  
efficient disposition of  
DOE spent nuclear fuel***



**National Spent Nuclear Fuel Program**

# *Repository Analysis*

- *Criticality*
  - *Demonstrate that DOE SNF will meet criticality requirement both pre- and post- closure*
  - *Develop packaging strategy*
- *Design Envelope*
  - *Complete licensing analysis and support for:*
    - *TSPA*
    - *Source Term*
    - *Preclosure Safety Analysis*



# *Repository Analysis (contd)*

- *Technical Planning & Analytical Support*
  - *Continue analyses necessary for inclusion of DOE SNF in License Application*
  - *Respond to requests for additional information*
  - *Develop, update, and maintain Spent Nuclear Fuel Database*
  - *Provide onsite DOE SNF support*



# *Canister Basket*

- *Publish results of analysis performed on the two MCOs and two 24" standardized canisters drop tested in FY 2004*
- *Update material properties analysis for standardized canisters and MCOs*
  - *Canister aging*
  - *Material Performance in interim storage, at elevated temperatures, and during drop events*



# *Transportation*

- *MCO Transportability*
  - *For shipment to repository*
  - *MCO designed for vertical shipment*
  - *Must be shipped horizontally to meet highway and rail overhead restrictions*
- *RW Transportation Support*
  - *Support RW's Cask Procurement Planning Process*
  - *Site Interface*



# ***Weld Development***

- *Weld Pedestal Development*
  - *Provide basis for the design of all attached equipment*
- *Ultrasonic Weld Inspection Development*
- *Eddy Current Weld Inspection Development*



# ***Advanced Neutron Absorber***

- *Continue ANA engineering development*
  - *Continue ASME codification*
  - *Perform mechanical/corrosion properties tests*
  - *Develop ANA ASME weldable material*



# ***Quality Assurance***

- *Maintain RW acceptance of the NSNFP*
  - *The NSNFP is an RW affected organization*
- *Ensure that quality related technical activities and products meet NSNFP QA program requirements*
- *Provide quality engineering support*
- *Maintain NSNFP corrective action tracking system*
- *Perform audits and surveillances*

