

Spent Fuel: Expedited Transfer and Research Needs

January 6, 2014

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Spent Fuel Storage

- **Many factors to consider for expedited transfer**
 - **Plant operation, economics, risk**
- **Current and future research focused on aging management and various aspects of high burnup fuel**

EPRI Analysis of Expedited Transfer

- **Evaluated three cases**
 - **Base, 10 years, 15 years**
- **Assumptions in several areas**
 - **Future spent fuel discharges**
 - **Dry storage technology**
 - **Available time and associated dose**
 - **Cost of additional equipment and design changes**

Impact of Expedited Transfer

- **Reduced inventory, Cs-137 source term, and decay heat**
- **Loading of additional canisters (+130-190)**
- **Increased worker dose (+1500-1900 person Rem)**
- **Change in public dose (increased distance and/or shielding)**

EPRI's Research Focus

- **Fundamental data on the behavior of dry storage systems and fuel over multiple decades**
 - **Aging management plans for long-term storage**
 - **Time-limited aging analyses**
 - **Transportation after long-term storage**

Spent Fuel Storage

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 - **Plant operation, economics, risk**
- **Current and future research will be focused on aging management and various aspects of high burn up fuel**