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Implementing DOE's Strategy for the Postclosure Safety case

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Steps in the Strategy to Complete the Postclosure Safety Case

- **Update design and improve TSPA model components**
- **Identify all factors affecting postclosure performance of the recommended system design**
- **Identify the Principal Factors--the Rocks of Gibraltar**
- **Develop Process Model Reports to provide all relevant information regarding these factors**
- **Ensure analyses complete and case is prepared to address postclosure performance objective**

Update Design and Improve TSPA Model Components

- **Process is underway--you have already heard of the efforts to enhance the design and you will be hearing of the efforts to improve the TSPA models**
- **You will hear how we are working to improve the models and underlying data in areas where feasible and where such changes affect overall assessment**
- **In other areas, we intend to adopt conservative, bounding models where appropriate**
- **We will also consider additional design options where those are appropriate**

Identify all Factors Affecting Postclosure Performance

- **Start from 19 principal factors for VA system design**
- **Augment list of factors to address new design features (e.g., drip shield environments and degradation)**
- **Ensure integration of factors, process models, and TSPA components**
- **Updated list of factors includes 38 factors for the nominal scenario and 12 additional factors for disruptive event scenarios**

Identify Principal Factors--Rocks of Gibraltar

- **Rank factors according to importance to postclosure performance**
- **Determine major remaining issues**
- **Assess value of additional information for each factor**
 - **Feasibility of resolving issues**
 - **Particular importance of uncertainties to safety case**

Develop Process Model Reports

- **Document technical basis of the process models (e.g., UZ flow and transport, near-field environments)**
 - **Site-suitability evaluation for SRR**
 - **Postclosure safety case for LA**
- **Provide all information relevant to principal factors sufficient to satisfy acceptance criteria of IRSRs**
- **Provide information regarding other factors (e.g., to justify bounding representation)**

Ensure Analyses Complete and Case is Prepared

- **Complete design and physical picture of safety case**
- **Update TSPA process models and complete PMRs**
- **Complete TSPA analyses consistent with requirements of 10 CFR 63.114 and 115**
- **Demonstrate compliance with reasonable assurance**
 - **Performance margin**
 - **Defense in depth (multiple, diverse barriers)**
 - **Barriers importance assessment**