Agenda for NWTRB Briefing at SNL on July16, 2015
Deep Borehole Disposal Field Test

8:00 a.m. **Introductions**
Introductory Remarks by DOE and NWTRB
Overview of the Agenda (MacKinnon)

8:15 a.m. **Overview of the Deep Borehole Disposal Concept (MacKinnon)**
- Why deep borehole disposal?
- Wastes being considered for Deep Borehole Disposal
- Previous work related to the deep borehole disposal concept
- Objectives of the Deep Borehole Field Test (DBFT)
- Elements and Organization of the Field Test
- DOE Procurement of Site and Contracting Services and Status
- Schedule and Key Milestones
- International and Nuclear Energy University Program Activities

9:15 a.m. **Geological Conditions and Site Evaluation (Sassani)**
- Hydrogeology and Geochemistry of fluids at depth
- Site Evaluation Status
- Site Evaluation Process
- Technical Siting Guidelines
- Evaluation of Technical Siting Guidelines using the Regional Geology GIS Database

10:15 a.m. **Break**

10:30 a.m. **DBFT Site Characterization (Kuhlman)**
- Deep drilling experience in crystalline rocks
- Characterization Borehole (CB)
- Characterization Targets and Methods
- CB Profiles
- Borehole Breakouts
- Environmental Tracers
- Hydrogeologic Testing

11:30 a.m. **Break and Working Lunch**

11:45 a.m. **DBFT Engineering (Hardin)**
- Borehole Emplacement Concepts
- Borehole Environment
- Disposal Overpack/Waste Package Design Concepts
- Safety of Emplacement Operations
- Borehole and Overpack Tradeoffs
- Waste Canister – Overpack Design Interface

- Borehole Seals
- DBD Requirements and Assumptions Flowdown

12:45 p.m. **Deep Borehole Emplacement Mode Hazard Analysis (Sevougian)**

- Main purpose of Emplacement Mode Hazard Analysis
- Assumed limitation on event consequences
- Choice of hazard/risk analysis technique
- Event Tree Analysis and Fault Tree Analysis
- Potentially hazardous events for wireline emplacement
- Preliminary fault tree for wireline emplacement
- Accident/failure databases
- Future work

1:15 p.m. **Licensing and Post-Closure Safety Assessment (Freeze)**

- Basis for long-term isolation
- Licensing Considerations
- Potential Regulatory Topics
- DBD Conceptual Model
- Coupled Process Models
- DBD Performance Assessment Model
- Sensitivity Analyses
- Performance Assessment Results

2:00 p.m. **Discussion**

4:00 p.m. **Adjourn**