

WM2017 Conference Panel Report

PANEL SESSION 96: Korean Special Challenges and Opportunities: A Problem Solving & Match-Making Special Session

Co-Chairs: Lisa Edwards, *EPRI*

Michael Snyder, *Sustainable Storage Systems (3S)*

Panelists:

1. **Young Hwan Hwang**, *Researcher, Radiation & Environment Lab., Central Research Institute, Korea Hydro & Nuclear Power Company (South Korea)*
2. **Ji-Hoon Lee**, *Principal Research Engineer, Radiation & Environment Lab., Korea Hydro & Nuclear Power Company (South Korea)*
3. **Hee-Dong Sohn**, *General Manager, Nuclear Decommissioning Technology & Business Development Team Doosan Heavy Industry (South Korea)*
4. **Doo-Ho Lee, Korea**, *Senior Research Engineer, Radiation & Environment Lab., Korea Hydro & Nuclear Power Company (South Korea)*

Summary of Presentations

This special Match Making session provided an opportunity for KHNP to brief prospective interested WM 2017 conference participants on the current status and remaining special needs in support of the ongoing Kori 1 & 2 decommissioning activities. 4 panelists – 3 from KHNP and one from Doosong – presented current activities, the challenges, and the opportunities that existed for possible additional technology support needs. These remaining challenges can be summarized as follows:

Characterization of RV/RVI and bio-shield

- Sample analysis
- Accurate calculation
- Gamma ray imaging system

Segmentation process

- Mockup test
- Process development and MMI related issues
- State of the art segmentation technology
- Min. of secondary waste generated from segmentation, including ventilation, etc.

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D&D radioactive waste management

- Metal waste treatment, recycle, and/or disposal
- Selective removal of radioactive nuclide from concrete

Waste issues for Decommissioning Waste

- Needs for Waste Tracking System from generation to disposal
- Radiological detection and measurement needs for various waste stream
- Scaling Factor development for decommissioning
- Development of waste package, transportation container in terms of the disposal facility (In presents only 200L, 320L drum is allowed)
- Reuse and clearance for volume reduction of concrete and metal waste
 - Metal waste treatment, recycle, and/or disposal
 - Selective removal of radioactive nuclide from concrete

Waste Issues for Operational Waste

- Need technical development to meet waste acceptance criteria for Disposal on past radioactive waste generated before 2003
- Need technical development for radioactive wastes of difficult treatment in interim storage to meet waste acceptance criteria for Disposal

Approximately 27 attendees were present at this Special Session. 5 firms signed up for the one-on-one sessions during the presentations, with 3 additional firms following up after the scheduled one-on-one sessions, resulting in an approximate 30% expression of interest by conference attendees. **Dr. Hwang** and **Dr. Lee**, the lead representatives for KHNP expressed gratitude for this opportunity and the apparent success. They will be looking to provide an update on progress at WM 2018, as well as a repeat Special Session should any further challenges be identified wherein potential opportunity may again exist for WM 2018 conference attendees.