

**Session 01**  
**Plenary: Education & Opportunity for the Next Generation of Waste Management Professionals**

Panel Reporter: Fred Sheil, BNGSL

The panel session formally opens the WM technical program and is intended to bring strategic level views from US and International speakers of some prominence.

The following individuals participated in the panel:

- Mark Frei, Deputy Assistant Secretary for Business Operations. DOE EM (representing James Rispoli who was unable to attend)
- Claes Lindberg, President, SKB International Consultants
- Dale Klein, Chairman, US Nuclear Regulatory Commission

Mark Frei presented an overview of the EM program achievements and forward plans. The progress made at major closure sites like Rocky Flats and Fernald demonstrated what could be achieved with well focussed plans and committed teams. The lessons learned from these achievements were being applied elsewhere in the EM program to ensure the impetus can be maintained. EM was continuing the drive to implement up to date program and project management techniques to exert improved overall control, delivery and predictability in what will often be technically challenging projects. Whatever achievements are obtained on project delivery however the number one focus remains safety. Significant improvements in safety performance on EM sites have been achieved but there is still room for further improvements and EM is firmly committed to driving through these improvements.

Claes Lindberg reported on the project and progress being made towards site selection and construction of the Swedish national spent fuel repository. He outlined the proposed design the ongoing work at the demonstration facility and the extensive program of public consultation to select the final site. Following identification of large areas that were geologically suitable an invitation was offered for communities to volunteer and this has now been narrowed to two potential sites. It is anticipated that there will be down-selection to the preferred site by about 2012 and then about 10 years construction. The scope of involvement of the local communities and their power of veto was of particular interest. He concluded with a short video which demonstrated the operating concept for the repository with disposal of spent fuel elements in copper canisters in vertical holes surrounded by bentonite clay accessed by horizontal tunnels.

Dale Klein presented a regulatory view of the forward challenges and opportunities facing the industry. The industry could be proud of what has been achieved over the years including an impressive record of safe and efficient nuclear generation. As the likelihood of nuclear new build increases there are a number of challenges that need to be addressed. The industry does have an aging workforce and must now restructure and retrain to support what could be a very aggressive new build program. The NRC is already recruiting at well above its wastage rate to be able to expand its capacity but clearly the new recruits will require some time to achieve their full competence. The same challenge faces the designers, constructors and operators with potentially over 20 plants in the near future. In an ideal world the most experienced

team would be assembled to deliver the first of the new generation of reactors but that luxury may not be available when secure energy supplies and environmental protection are dual targets. The NRC will work with the industry to facilitate the new build program with some innovative regulatory approaches but will also regulate firmly to ensure that the excellent safety record of the industry remains the number one priority.