Session 10 Operating experience in wet and dry storage

In this session several papers were presented describing operating experience of spent fuel storage in both wet and dry conditions. The session was useful in providing for the exchange of information on common issues between experts from different countries who might otherwise not be aware of solutions developed for similar issues in their own countries. A report on an IAEA project to gather lessons learned in wet and dry spent fuel storage was also presented provided a further basis for information exchange.

Two Japanese papers were concerned with determining the status of spent fuel casks after dry storage for up to 10 years and inspection procedures were described for that purpose. The results were favourable with no signs of leakage and only minor signs of cask seal corrosion. Comments were made to the effect that in order to provide confidence that fuel recovery from the casks would be possible after several tens of years some monitoring of the state of the fuel cladding and baskets inside the casks would be necessary and should involve some destructive testing of the cask contents.

An analysis of possible regional strategies for the back-end of the fuel cycle in Central and Eastern Europe by an independent group of experts was described. It examines the potential for regional cooperation and looks to the far future when there would be a greater degree of harmonization than at present and when existing NPPs would be replaced by GEN-4 fast breeders together with regional geological repositories.

An analysis of the thermal environment in and around a store of dry storage casks using computer modelling was described. It illustrated how the study could be used to optimize the storage geometries to prevent overheating.