

Foreign Travel Quick Look Report (and Final Foreign Trip Report)

- Subject:** Foreign Travel Quick Look Report (and Final Foreign Trip Report) - Conduct NRC-Sponsored Workshop on Licensing and Inspection of Spent Fuel Dry Storage Installations for the Kazakhstan Atomic Energy Committee (KAEC) and to Discuss Ongoing or Planned Safety Assistance Activities with KAEC, April 30 through May 6, 2006
- Travel Dates:** April 30 - May 6, 2006
- Location:** Almaty, Kazakhstan
- Organization/
Committee:** Kazakhstan Atomic Energy Committee (KAEC)
- Desired Outcome:** KAEC staff has a basic understanding of U.S. Nuclear Regulatory Commission (NRC) spent fuel storage program and how NRC conducts its licensing and inspection activities. That staff from KAEC would then use this information to inform its national spent fuel storage licensing and inspection program.
- Results Achieved:** NRC staff conducted a workshop on licensing and inspection of spent fuel dry storage installations. NRC staff made presentations on NRC process and methods used to make a licensing determination, and discussed NRC operational and inspection experiences with dry cask spent fuel storage (ADAMS accession number ML060940060). KAEC staff attending the workshop were engaged and based on their questions appeared to have an understanding of NRC's program and how it might use this information in KAEC licensing process.
- Summary of Trip:** KAEC must license the interim dry storage of spent fuel from the BN-350 reactor that started operation in 1973 and was shut down in March 1998. The reactor produced weapons materials and operated with a uranium-235 enrichment of 17 to 26 percent. The fuel assemblies at the reactor have been placed into dried and sealed canisters based on the fuel condition. These canisters would be loaded into a dry cask storage system under development in Russia, placed on a storage pad outside of the reactor building for interim storage and then (at some future date) transported to a dry cask storage facility in Baikal for storage up to 50 years.
- This is the first of a kind facility in Kazakhstan, the first use of a dry cask storage and the first certification of transport package by KAEC. KAEC plans to license the interim storage and the storage cask at the BN-350 reactor site, the transportation package and the dry cask storage at the Baikal long term storage facility. The KAEC licensing process for spent fuel dry storage and transportation is based in large part on NRC licensing guidance documents. This will be the first licensing of dry storage of spent fuel and of the transportation package. KAEC requested the workshop on NRC's dry cask storage program to help

them better develop its licensing program and to discuss technical issues regarding how NRC makes its licensing and certification decisions, and how NRC conducts its inspections. KAEC was very interested in how NRC staff made its determination for licensing period and inspection of foreign vendors.

NRC staff made 12 presentations on NRC licensing and inspection and held technical information exchanges and discussions for each presentation. The workshop was well received by KAEC staff and management and the presentations stimulated several very good technical information exchanges.

This quick look report serves as the final report and was placed into ADAMS to create an official record of reporting for the trip.

Next Steps: None

Policy Issues: None

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