Meeting Report

DATE: April 2, 2008

TIME: 9:30 A.M. - 12:30 P.M.

PLACE: Offices of Nuclear Energy Institute
1776 "I" Street NW
Washington, D.C.

PURPOSE: To Continue to Identify and Discuss Transition Planning Issues Related to the Extended Interim Storage of Low-Level Radioactive Waste (LLRW) by Utility, Fuel Cycle and Materials Licensees.

CATEGORY: Category 2. Public may attend and participate at designated times.

BACKGROUND:

The U.S. Nuclear Regulatory Commission (NRC) staff has recently conducted a series of meetings with the Nuclear Energy Institute (NEI) and the Electric Power Research Institute (EPRI), open to the public, regarding the preparation of guidance for licensees related to the likely need for extended interim storage of some low-level radioactive waste. The last such meeting was held on January 30, 2008. There it was reaffirmed that the discussions should be held on a regular basis, broadened in range of topics and include the interests of materials and fuel cycle licensees as well as nuclear utility licensees. The meeting reported on herein was intended to provide opportunities for radioactive materials licensees, fuel cycle licensees and non-power reactor licensees to discuss safety and security issues associated with their need to provide for extended interim storage of LLRW. NRC's objective is to update its regulatory program to help ensure that LLRW can be safely and securely stored for the potentially extended periods that may be necessary after the Barnwell facility closes to most U.S. generators on July 1, 2008.

DISCUSSION:

The meeting included nuclear utility representatives, representatives of various materials licensees and users groups, a representative from the educational community with a research reactor, a representative of the Health Physics Society, and (by teleconference) members of the public. NRC representation included the Office of Federal and State Materials and Environmental Management Programs (FSME), the Office of Nuclear Reactor Regulation (NRR), and the Office of the General Counsel (OGC). Scott Flanders, Deputy Director of the Environmental Protection and Performance Assessment Directorate (EPPAD), provided a brief status report of NRC activities to prepare for the need for extended storage including updating guidance and inspection procedures and preparation to review proposed NEI/EPRI guidance. He also reiterated the importance of on-going communication among affected stakeholders in meetings such as this. Mr. Flanders also welcomed the participation of a broader spectrum of stakeholders.

Enclosure 1

Ralph Andersen provided a status report on NEI/EPRI guidance and said that it would be submitted for NRC review in a few days.

The topic of terminology was raised in two contexts. Mr. Andersen said that it is important for clear communication that we work to agree on common terminology and common understanding of definitions. Mr. Len Smith, of the Council on Radionuclides and Radiopharmaceuticals (CORAR), said that it is important that we understand that some of our "insider" terminology can be perceived negatively by the public. He used the term "waste stream" as an example.

Mr. Andersen once again asked NRC to clarify its regulatory position that there are no time limits on storage and the fact that a 10 CFR Part 30 license is not necessarily required of utilities providing for extended storage.

NEI has requested a meeting with NRC's Office of Nuclear Security and Incident Response to discuss plant security issues. Because of the sensitivity of the topic, the meeting may need to be closed to the public. It was mentioned that it may be appropriate to include a broader group of licensees to ensure all potential security issues are identified and resolved. The meeting may be followed with a public meeting, informed by the results of the non-public meeting to provide a summary discussion of security related to LLRW storage.

Participants representing various interests were asked to summarize their observations and concerns regarding LLRW storage, and these are described below.

Generally, utilities and fuel cycle licensees have the capability to provide for LLRW for time periods measured in years. Many materials users have less capability to provide for extended storage because of various limitations, such as space constraints.

John Ernst said that research and test reactor operations waste is mostly Class A and not impacted by Barnwell closure. Some decommissioning waste, including irradiated hardware, would be affected.

Radioactive sealed sources (RSS) represent a significant concern for materials licensees. RSS are generally small in size but are largely classified as Class B, C or greater- than-Class-C (GTCC) because of their specific radioactivity. Because of their potential accumulated radioactivity, even Category 3 sources or below, in aggregate, may represent a potential security concern. In the past, these sources could be consolidated for cost effective disposal. Kate Roughan pointed out that there is some capability to refurbish and or recycle some sources now. Cesium and strontium are the most problematic isotopes because of their relatively long half life.

Alan Pasternak said that stored waste would have a negative impact on licensees that were outgrowing their facilities. Inability to get rid of waste would make decommissioning of the old facilities problematic.

It was observed that not all Class A waste meets Clive, UT waste acceptance criteria. This includes certain special nuclear material (SNM) and untreated animal carcasses.

It was generally agreed among materials licensees that the need to store waste could limit or curtail beneficial, productive operations as resources are redirected toward management of stored waste.

Scott Kirk said that the Health Physics Society has no formal position on LLRW storage but considers permanent disposal to be the preferred alternative.

Diane D'Arrigo inquired about the need for a waste confidence decision related to LLRW. It was pointed out that the concept is legally applied to HLW. She asked if disposal was a requirement. While there is no specific regulatory requirement to dispose of LLRW, industry preference and regulatory guidance points strongly in that direction.

Ralph Andersen pointed out that NRC regulations do provide for various disposition pathways for radioactive waste; decay-in-storage for handling as non-radioactive waste, "traditional" LLRW disposal, alternative disposal via 10 CFR 20.2002, and long-term storage of at-plant waste as a part of a long-term decommissioning strategy.

There was an inquiry as to whether or not Regulatory Guide 1.21 addresses aspects of LLRW storage. This needs further research and clarification by NRC's Office of Nuclear Reactor Regulation.

It was suggested that state regulators and/or umbrella organizations be specifically asked to participate in future meetings since the majority of affected materials licensees are licensed by Agreement States.

Affiliations of individuals represented herein, and not otherwise identified, may be found on the attendance list which is part of the meeting record.

ACTIONS:

1. NRC staff to specifically engage an even broader range of stakeholders. This should include Agreement States or umbrella organizations representing Agreement States.

2. NRR to review and clarify relationship of RG 1.21 to extended storage of LLRW.

3. Schedule and conduct a meeting between NSIR and NEI and other industry groups on security considerations for extended interim storage of LLRW.

4. FSME to schedule next public meeting on transition planning for extended storage in June.