

Meeting Report

DATE: September 18, 2008

TIME: 9:00 A.M. – 12:00 P.M.

PLACE: Offices of Nuclear Energy Institute
1776 “I” Street NW
Washington DC

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 other stakeholders with an interest in extended interim storage of low-level radioactive waste (LLRW). The meetings have been open to the public. The most recent previous meeting was held on April 2, 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 representatives of States, radioactive materials licensees, and non-power reactor licensees to describe safety and security issues (appropriate for public discourse) 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 following the closure of the Barnwell facility to most U.S. generators as of July 1, 2008.

DISCUSSION:

Patrice Bubar, Deputy Director, Environmental Protection and Performance Assessment Directorate, opened the meeting and framed the context of the discussion. She stated that the purpose was to elicit feedback regarding recent NRC staff initiatives, discuss challenges faced by State regulators, discuss challenges faced by a variety of licensees, and to identify, discuss, and outline a resolution path for any emerging issues.

Anna Bradford, Branch Chief, Low-Level Waste Branch, summarized recent NRC staff initiatives including the recently completed regulatory issue summary (RIS) for materials and fuel cycle licensees, updated inspection procedures, a forthcoming RIS clarifying regulatory positions on LLRW storage at utilities and reacting to guidance prepared by the Electric Power Research Institute (EPRI) related to LLRW storage, and the annual Commission paper (SECY) reporting on staff's plan for continued interaction with stakeholders.

Mark Yeager, State of South Carolina, representing the Conference of Radiation Control Program Directors, referred to scoping surveys done in the late 1990's in anticipation of Barnwell limitations to try to understand the impact of extended interim storage. At the time, extended storage did not appear to be a big problem. However, maintaining security was a concern even before implementation of increased control orders (ICs). Mr. Yeager suggested contacting Thor Strong, MI, regarding his experience with extended LLRW storage.

Debbie Gilley, State of Florida, representing the Organization of Agreement States, expressed concerns about abandoned sources and financial assurance since the cost of LLRW disposal will become increasingly difficult to predict. Ms. Gilley spoke of the difficulties associated with transfer of the title to radioactive material that is still under license to a third party. She is also concerned about the difficulties in instilling the security culture among a variety of materials licensees and the increased regulatory burden with the imposition of increased control orders. She noted that some licensees are separating accumulations of stored materials to avoid imposition of ICs.

Ralph Andersen, NEI, raised the issue of license termination when the circumstance of "stranded" LLRW must be factored in. He also suggested that NRC consider how health, safety and security aspects of "stranded" LLRW may impact normal license termination. License termination regulations are currently based on the assumption that resultant waste can be disposed of.

John Ernst, University of Missouri, representing the interests of research and test reactors (RTRs), said that the only Class B/C waste normally produced by these reactors is irradiated hardware. However, he stated that the financial consequences of extended waste management have the potential to have a negative impact on research conducted with RTRs.

Kate Roughan, speaking on behalf of the Nuclear Sector Coordinating Council, expressed concerns with additional security problems and requirements that could accrue with the accumulation of unwanted sources by licensees. She also raised a concern regarding disposition of sources containing radioactive material with foreign origin. Ms. Roughan envisioned a solution to the unwanted source problem as a cooperative effort between the States, industry, NRC, and DOE.

Mark Carver, Entergy, noted that he is using the EPRI guidelines, currently with NRC for review, as a template for operational aspects of extended storage. Representatives of other utilities discussed plans for gearing up for extended interim storage. They suggested that such storage for periods of up to 20 years, while not desirable, was manageable. There was also some optimism related to the viability of offsite commercial solutions offered by vendors such as Studsvik and EnergySolutions.

Miguel Azar, Exelon, noted that Illinois regulators, with extensive regulatory oversight of materials licensees and some oversight of some aspects of operations of power reactors within Illinois, have more concern regarding the storage issues of small licensees than those with large infrastructure and significant resources.

Mr. Andersen noted that while the adaptation due to market shift was laudable, stakeholders should be focused on viable disposal alternatives, not becoming experts in extended LLRW storage.

Mr. Andersen suggested that extended LLRW storage may suggest the need for tracking of stored waste similar to the tracking of disposed waste through the manifest tracking system. He suggested coordinating with the Office of Nuclear Reactor Regulation (NRR) regarding the review of Regulatory Guide 1.21 regarding the possible need for periodic reporting requirements for stored LLRW.

Ms. Gilley suggested the need to begin looking at possible licensing requirements for a “storage only” facility. She also suggested consideration of increasing the maximum half life for decay-in-storage isotopes.

During the public comment period, Diane D’Arrigo inquired whether or not licensees were processing their own waste in conjunction with storage. Mr. Carver said, for the most part, utilities are just scaling back operational processes to create less waste that requires storage. NRC staff noted that, typically, processing of waste from materials licensees is provided by third party vendors.

Ms. D’Arrigo also inquired about the availability of EPRI documents related to LLRW storage. EPRI indicated that such documents are publicly available for purchase.

ACTIONS

1. Follow-up with NRR regarding clarification of criteria for at-plant storage of Class C irradiated hardware.
2. Contact other States (e.g. Michigan and Illinois) as well as compacts and industry groups with insight and experience regarding LLRW storage issues.
3. Continue periodic meetings with stakeholders regarding transition planning issues as lack of disposal access has an increasing impact. Invite representatives from disposal site to participate in the next such meeting.
4. Coordinate with NRR regarding the review of RG 1.21 regarding possible need for periodic reporting requirements for stored LLRW.