Low-Level Waste Tax Initiative Fails in Utah

Voters in the state of Utah defeated a November ballot initiative that would have increased the tax on a cubic foot of low-level waste disposed of in the state from 10 cents to as much as \$150. Nearly 60 percent of voters in Salt Lake County voted against the measure, which was targeted at one industry and one company, Envirocare of Utah, while nearly 75 percent of voters throughout the rest of the state opposed the measure.

The initiative was sponsored by Utahns for Radioactive Waste Control. It would also have restricted Utah from licensing or siting a Class B or Class C radioactive waste disposal facility.

"We are gratified by the level of legislative, corporate, and public support that has come out against Initiative 1," said Dwayne Nielson, CEO of Envirocare, which spent millions of dollars working to defeat the initiative.

"With the Initiative behind us, we're looking forward to resuming our business of serving our customers, and providing safe, environmental solutions to Utah and the country."

NRC Proposes Changes in Decommissioning Fund Requirements for Materials Licensees

The U.S. Nuclear Regulatory Commission is proposing major changes in its decommissioning financial assurance regulations for the first time since they were instituted in 1988. The proposed changes, published October 7, would require more money from the 10 percent of the agency's nearly 5000 materials licensees required to provide financial assurance for decommissioning costs, and would, for the first time, require waste brokers to provide financial assurance. NRC officials are concerned that the outdated financial assurance requirements do not adequately ensure that licensees can afford the increasing costs of decommissioning.

Under current regulations, the amount of financial assurance that must be provided can be based on either a site-specific cost estimate or on one of several specific dollar amounts, called certification amounts. These are based on possession limits and range from \$75 000 for sealed source licensees to \$750 000 for licensees possessing large quantities of unsealed materials. The proposed rule increases the certification amounts by 50 percent. Also, licensees that base financial assurance on a decommissioning cost estimate will have to prepare new cost estimates every three years. Waste brokers would have to provide site-specific decommissioning cost estimates. In addition, large sealed source licensees, such as industrial food irradiation companies, would not longer be able to use a certification amount, but instead would have to prepare a site-specific decommissioning cost estimate.

NRC Pursues Rulemaking on Solid Materials Release

The commissioners of the U.S. Nuclear Regulatory Commission, responding to a staff recommendation, on October 25, 2002, instructed the NRC staff to submit for

approval by January 31 a proposed schedule for a rulemaking on solid materials release, or clearance, from nuclear facilities.

In making the assignment, NRC Chairman Richard Meserve said, "I approve the staff's recommendation because I believe it is important to maintain momentum on this issue, to provide a consistent, risk-informed basis for the release of solid materials in the near term, and to prepare the underpinnings for the future decommissioning of the current population of U.S. power reactors."

A National Academy of

Correction The November/December 2002 issue of Radwaste Solutions on page 9 had a headline "Six Utilities Quit Private Fuel Storage Consortium." This statement, along with parts of the accompanying news story, is in error. PFS is a Limited Liability Company, and none of the six utilities referenced has quit PFS. The news story was generated about a commitment made in early July by several PFS members to not fund construction of PFS unless the U.S. Department of Energy's Yucca Mountain site does not proceed in a timely fashion (the date used during the congressional consideration of the site is a 2010 opening) or the needs of their plants require PFS site usage. Private Fuel Storage is a resource for the entire utility industry, the licensing of which has been funded by the Members of PFS. The users will fund construction and operation in each phase, and any utility (including Members) will make its own individual determination of when and to what degree it utilizes the site.

Radwaste Solutions regrets the error.

Sciences report released in March 2002 concluded that the NRC's current system of releasing solid materials on a case-by-case basis is overly burdensome and inconsistently applied (see "Headlines," *Radwaste Solutions*, May/June 2002, p. 8).

The commissioners also directed the NRC staff to determine whether the NRC should implement or endorse the ANSI standard (ANSI N13.12) of 1 millirem per year as the primary dose for clearance.

The issue of solid materials release is addressed in a feature article in this issue. See "Eluding Consensus: Free Release Standards for Decommissioning Projects," page 9.

Pilot Project Urged in Spent Fuel Transportation

The Decommissioning Plant Coalition (DPC) is recommending that the U.S. Department of Energy undertake a pilot project at a decommissioning reactor to demonstrate the ability to take title to, load, and transport spent fuel from a nuclear power plant to a licensed repository.

"Like others in the nuclear industry, we are anxious for the Department to move as expeditiously as possible to meet its obligations under the Nuclear Waste Policy Act," said Russ Mellor, DPC chairman and president and CEO of both Yankee Atomic Electric Co. and Connecticut Yankee Atomic Power Co. "However, at single unit decommissioning sites, the burdens of managing spent fuel represent a significant and increasing burden on resources and ratepayers."

Decommissioning plants at single-unit sites account for only about 2 percent of the total amount of commercial spent fuel destined for final disposal at Yucca Mountain. But the costs of spent fuel and high-level waste management at these sites are disproportionately large. For example, Maine Yankee's \$154 million estimate for spent fuel management represents some 28 percent of the total decommissioning budget of \$547 million.

"We believe that the pilot project should be extended to include loading and transport of spent fuel from a decommissioning plant to an interim storage facility," continued Mellor. "Such a program would demonstrate the feasibility of interacting with existing systems at utilities' facilities and would assist the [Transportation Integration Contractor] in identifying unforeseen transportation issues."

The DPC was established in 2001 to highlight issues unique to civilian nuclear power plants undergoing decommissioning, with special emphasis on single-unit sites. Members of the coalition include Connecticut Yankee, Dairyland Power Cooperative, Maine Yankee Atomic Power Co., the Sacramento Municipal Utility District, and Yankee Atomic.

International Updates

- Responding to International Atomic Energy Agency urging, Bulgaria has agreed to send its spent nuclear fuel to Kazakhstan for storage. The IAEA has said that the Kozloduy nuclear power plant does not have proper security for storing nuclear materials that could be used in the production of weapons of mass destruction. Transfer of materials was expected to begin before the end of 2002.
- The Lithuanian government was set to approve an Ignalina shutdown strategy that calls for the decommissioning of the two Soviet-designed RBMK units to be finished in 2030. A longer decommissioning process, to be completed in 2065, was also considered, but the government believes that extending the process will create problems, even though it would require less money up front. Lithuania and the European Union are negotiating EU funding for decommissioning as part of Lithuania's EU membership. Lithuania agreed to close Ignalina-1 by 2005 and Ignalina-2 in 2009 as a condition of membership.

New Security Orders for Dry Spent Fuel Storage Facilities

On October 16, the U.S. Nuclear Regulatory Commission issued orders to companies with dry spent fuel storage facilities to maintain heightened security readiness. The orders call for all companies to implement specific interim compensatory measures (ICMs) to meet the current threat environment. The commission had earlier issued similar ICMs for nuclear power plants, decommissioning reactors, highly enriched fuel plants, and spent fuel transport.

Because the information is sensitive, the NRC did not release details of the orders, but some of the measures may include additional security personnel and patrols, installation of additional physical barriers, more restricted access to the facilities, and increased coordination with local law enforcement and military authorities. The orders will remain in effect until the NRC has determined that the threat level has diminished.

EPA, NRC Sign Agreement Ending Dual Regulation of D&D Sites

Under a Memorandum of Understanding (MOU) signed in October, the U.S. Environmental Protection Agency will defer to U.S. Nuclear Regulatory Commission radionuclide release regulations for most facilities decommissioned under NRC authority. The agreement eliminates the dual regulation of many sites by the EPA under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, or Superfund) and by the NRC. The MOU provides for NRC and EPA consultation when, at the time of license termination, groundwater contamination exceeds EPA-permitted levels, when the NRC considers restricted release of a site, or when residual radioactive soil levels exceed those defined in the MOU.

The agreement stems from 1999 House Committee on Appropriations recommendation that the two agencies enter into an agreement that "clarifies the circumstances for EPA's involvement at NRC sites." But while the MOU resolves some of the jurisdictional friction between the two agencies, the NRC will continue to push for legislation to completely eliminate the EPA's jurisdiction over decommissioning facilities, stating that the NRC wishes to "eliminate the possibility of dual regulation" at all its decommissioning sites.

Milestones

• The last of 3100 cubic meters of transuranic waste in the state of Idaho were shipped from the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory (INEEL) to the Waste Isolation Pilot Plant in October, two months ahead of schedule. An agreement between the DOE and the state of Idaho had stipulated that the waste would be out of the state by the end of 2002.

Also at INEEL, 43 buildings were closed during fiscal year 2002, reducing the amount of INEEL site infrastructure requiring funding. The number of closures exceeds the original goal of 34 buildings and eliminated some 202 000 square feet. This is saving about \$2.8 million in maintenance and operations costs.

- The Big Rock Point nuclear power plant began loading its first dry spent fuel canister on November 4, and the filled canister was expected to be transferred to the storage pad by mid-month. After the loading of the first canister, Big Rock Point planned a post-job critique to review the process and apply lessons learned. The second canister was scheduled to begin loading in early December.
- The large components at San Onofre-1 were removed on October 18. The reactor pressure vessel was being prepared for shipment to Barnwell, S.C., in early 2003. The three steam generators were placed on skids in preparation for rail shipment to Envirocare of Utah before the end of 2002
- Rocky Flats is currently shipping low-level waste to Envirocare of Utah and the Nevada Test Site at a rate of 20 trucks per day. Plutonium residues are being shipped to the Waste Isolation Pilot Plant at a rate of eight trucks per week. Plutonium metal and oxides are being shipped to the Savannah River Site in South Carolina.
- The Spent Nuclear Fuel Project at Hanford successfully moved 101 spent fuel assemblies from an old TRI-GA research reactor to safe storage in the Interim Storage Area outside the Canister Storage Building in Hanford's 200 East Area. The relocation, which took place in mid-October, was part of the SNF Project's mission to consolidate, manage, and store all onsite spent fuel in one location on Hanford's central plateau. The TRIGA reactor operated for 13 years between the late 1970s and 1986 during the facility's mission to produce and test fuels and materials for the Fast Flux Test Facility.
- All fuel has been moved out of Rancho Seco's spent fuel storage pool and into dry storage. With pool dismantlement work ahead, Sacramento Municipal Utility District management has decided to store all low-level waste onsite in the plant's 50 000-cubic foot LLW storage building, since funding for shipping the waste to Barnwell is not available at the current time.