

Yucca Mountain Updates

Elections

With the defeat of Sen. John Kerry (D-Mass.) in the November presidential election, proponents of the Yucca Mountain project no longer have to worry about an Executive Branch decision to shut down the project. Kerry had promised if he was elected that the Yucca Mountain project, which he deemed unsafe, would be immediately shut down unless it could be proven that the proposed high-level waste disposal facility at the mountain was being developed under the principles of "sound science."

The Senate elections, however, have resulted in the promotion of the nation's most vigorous Yucca Mountain opponent. With the election defeat of Senate Minority Leader Tom Daschle (D-S.D.), Nevada Sen. Harry Reid, who had been serving as the Senate's assistant minority leader, has moved up to the top position. Reid has spent decades fighting the Yucca Mountain project. With an increase in the Republican majority in the Senate as a result of the election, however, it is unclear how much Reid's opposition will actually affect the project. And according to some political commentators, the state of Nevada may have lost much of its bargaining power over Yucca Mountain by voting for President George W. Bush over John Kerry, demonstrating that Nevada citizens valued other issues more highly than high-level waste disposal in the state—despite the fact that a recent poll states that 77 percent of Nevadans would oppose the nuclear waste repository planned for Yucca Mountain if given the chance to vote for or against it.

Budget

At press time, Congress, in a lame duck session, passed an energy and water funding bill that included \$577 million for the DOE's repository program, without addressing several issues that the White House had reportedly asked for. The allocation matches the fiscal 2004 funding, but falls short of the administration's request for \$880 million for fiscal 2005.

The White House had asked that the lame duck session address provisions that would reclassify the DOE waste fee as a user fee, which would ensure that the money collected from nuclear utility ratepayers each year could be used only for the DOE waste program. Other requested provisions would have overturned a U.S. Court of Appeals rejection of the federal radiation protection standard for the repository.

License Application

In November, the NRC Commissioners declined to rule on the U.S. Department of Energy's appeal of a licensing board decision that revoked the DOE's June 30 certification of repository-related documents, stating that

the time was not yet ripe for commission action. The DOE has said it will recertify the documents when they are all retrievable on the central licensing support network, an Internet-based document retrieval system that could be used as a discovery tool during the U.S. Nuclear Regulatory Commission's licensing effort on the proposed Yucca Mountain repository.

Later in November, Margaret Chu, director of the DOE's Office of Civilian Radioactive Waste Management, stated that the department would not be submitting its license application for the repository at the end of December, as originally planned. Chu did not give a new date for the license application submittal, but noted that she did not expect a significant delay. She predicted that the DOE would receive a spring 2005 certification of the Licensing Support Network (LSN) from the NRC licensing board. The NRC requires that LSN certification be obtained at least six months before the NRC staff can formally accept for review a license application.

Nevada Opposition

In early November, Nevada lawmakers approved spending \$1.75 million to continue the state's effort to fight construction of the proposed nuclear waste repository at Yucca Mountain. The amount included \$1.1 million in new money for the Agency for Nuclear Projects, and \$650 000 from a previous appropriation for the attorney general's office for outside legal assistance.

In the past, the Nuclear Projects Agency has relied on federal support for its fight against Yucca Mountain, but Congress allocated only \$1 million for fiscal 2004, much less than the \$2.5 million anticipated. Federal funding for 2005 will most likely continue at 2004 levels.

Voters Approve Initiative Limiting Waste Storage at Hanford

On Election Day, voters in Washington state approved by a wide margin Initiative 297, which calls for blocking the U.S. Department of Energy from sending more waste to the site until the waste already there is cleaned up. The measure was to take effect on December 2 (30 days after the election). It was sponsored by Seattle-based Hanford watchdog group Heart of America Northwest.

The Hanford site is the nation's most contaminated nuclear site, with 53 million gallons of highly radioactive waste stored in underground tanks and some 75 000 55-gallon drums of transuranic, radioactive, and hazardous waste buried onsite. The site also contains disposal facilities where waste from other DOE cleanup sites has been shipped for disposal.

At press time, there was speculation on how the initiative might be enforced and whether the DOE would

choose to fight it. Initiative opponents point out that the initiative pre-empts the federal government's nuclear waste and interstate commerce policies, imposes a tax on the federal government, and addresses more than one issue, which is barred by the state constitution.

Washington state business groups and the local Chamber of Commerce opposed the initiative because they felt that a costly court battle would be inevitable and would delay cleanup, as well as jeopardize some \$2 billion in cleanup funds the site receives each year from the DOE appropriation.

D&D Milestones

- Demolition of the former UniTech General Services Inc. nuclear laundry facility in Columbia, S.C., began in mid-November. UniTech left the site in 2003 for a new facility in Barnwell County. A \$5 million federal grant covered the expense of moving the company and will pay for the site cleanup. A very small amount of radioactive materials may remain underground in pipes and pits at the site, but all radioactive materials have been removed from the above-ground portion of the facility.
- The design, fabrication, and installation of a customized mechanical and loading system to be used to package approximately 135 000 cubic feet of hazardous cold metal oxides from Fernald's Silo 3 has been completed, according to MHF Logistical Solutions, the site's packaging contractor for the Silo 3 project. In developing the customized solution, the company harnessed existing loading and packaging technologies not previous used in similar situations. A sophisticated conveyor system and bulk packaging system, operated by an electronic control system, was developed to load the material into the packaging. The project will create about 2000 packages, with each package holding some 5000 pounds of hazardous material.

Fernald Silos Project Looking for Disposal Site

In mid-November, the U.S. Department of Energy began looking for alternatives to the Nevada Test Site (NTS)

for disposal of the Silos 1 and 2 waste at the Fernald site. The silo cleanup is the last major challenge for the Fernald site cleanup project, which is scheduled to be concluded in 2006. The silo wastes are primarily residues from the extraction of uranium from high-grade ores received in the late 1940s and early 1950s from the Belgian Congo, and include high concentrations of radium-226 and thorium. The concrete silos in which the wastes are currently stored are more than 50 years old.

Nevada has threatened to file a lawsuit if the wastes are sent to that state. Last year, Utah also refused to accept the waste at its White Mesa uranium mill. The Energy Department has not necessarily given up on sending the waste to the NTS, a department spokesman stated, but would like to have other options as well.

Waste Control Specialists, in Texas, has offered to store the wastes at its disposal facility in Andrews County, and has applied to the Texas Department of State Health Services for approval to accept the waste.

New Faces

- Energy Secretary Spencer Abraham submitted his resignation on November 14. Abraham, who cited as his reason for leaving meeting the demands of his family and personal commitments, said he would stay on until his successor is confirmed. Abraham became Secretary of the U.S. Department of Energy in January 2001. At press time, there was no indication of who might be nominated as Abraham's successor.

- President Bush is filling the two vacant U.S. Nuclear Regulatory Commission seats with recess appointments. Vice Admiral Albert Konetzni, who retired from the Navy in July 2004 after 38 years of service, and Gregory Jaczko, science adviser to Sen. Harry Reid (D-Nev.), will be appointed to seats on the Commission, to serve through 2006.

The Jaczko appointment has been held up in the Senate for some time, with many Republican senators and the nuclear industry opposed to it. The recess appointment is the result of a compromise deal between the White House, Sen. Reid, and Senate Republicans. Under the deal, Jaczko will serve for two years, will not be renominated for a full term, and must recuse himself from any votes on matters related to the proposed Yucca Mountain repository during his first year. Current NRC Chairman Nils Diaz will continue to serve as chairman until June.

The agreement lifts the block on dozens of presidential nominees and allows the Senate to confirm close to 200 appointments to federal positions.

- The U.S. Nuclear Regulatory Commission's Advisory Committee on Nuclear Waste has elected Michael Ryan as chairman and Allen Croff as vice chairman for one-year

terms. Ryan, an independent health physics consultant, has been a member of the ACNW since 2002; Croff, who retired from Oak Ridge National Laboratory after 29 years of service, joined ACNW last July. The committee provides the NRC with independent technical advice on the regulation, management, and disposal of radioactive wastes.

Utah Again Challenges Private Fuel Storage

The state of Utah is taking its fight against Private Fuel Storage (PFS), the company that wants to build a spent fuel storage facility on the Skull Valley Goshute Reservation in the state, to the Supreme Court. The state has filed a petition with the U.S. Supreme Court, asking for a review of a ruling by the 10th Circuit Court of Appeals that voided a series of nuclear laws passed by the Utah legislature. The appeals court found that the Utah laws violated the Atomic Energy Act, which gives the federal government complete authority to license and regulate transportation and storage of high-level waste. The Supreme Court was expected to decide early in 2005 whether to grant Utah's request for review.

In other PFS-related news, Gary Lanthrum, director of the U.S. Department of Energy's spent fuel transportation program, stated that the canisters the PFS plans to use to ship and store spent fuel at its facility may not be acceptable for use at Yucca Mountain. Lanthrum also reportedly said that the DOE can only take spent fuel from reactor sites, which would make the PFS plan to store spent fuel unacceptable under the DOE's current contract with utilities.

Defense Authorization Bill Allows Waste Reclassification

High-level wastes stored at the Idaho National Engineering and Environmental Laboratory and the Savannah River Site can be reclassified as low-level waste and left in place, under provisions in the defense authorization bill for fiscal 2005. Defense HLW stored at Hanford will not be reclassified under the bill.

Domenici: Legislation Needed to Ensure LLW Disposal Capability

Legislation is needed to ensure that low-level radioactive waste generators will continue to have access to dis-

posal capacity, according to Sen. Pete Domenici (R-N.M.). During a Senate hearing held September 30, Domenici said he and other lawmakers do not want to wait until generators have no choice but to store the waste onsite, and that Congress should begin working on the legislative answer sooner rather than later.

The hearing included testimony from Alan Pasternak, technical director of the California Radioactive Materials Management Forum, who said he advocates amending the Low-Level Radioactive Waste Policy Act of 1980 (and its 1985 amendment) to provide for federal government involvement, not repealing the law. Pasternak also suggested that some U.S. Department of Energy LLW disposal facilities could be used for disposal of commercial waste in the future.

Domenici noted that the federal government has enough land that an LLW facility could be located on federal land without disturbing pristine wilderness.

When the Barnwell LLW disposal facility closes to all but Atlantic Compact state waste in July 2008, 36 states will be without access to disposal for Class B and C LLW (the Envirocare of Utah site, open to all states, accepts only Class A waste; the US Ecology site in Washington state can accept waste only from the Northwest and Rocky Mountain Compact states).

International Updates

● In early November, a young man protesting a German nuclear waste shipment died after being hit by a train carrying vitrified high-level waste being shipped from France to the Gorleben interim storage facility in Germany. The man, Sebastian Briard, had attached himself to the tracks at Avricourt, close to the German border, and was unable to free himself in time to avoid being hit by the train. His leg was severed, and he later died, despite receiving emergency treatment at the site. The train resumed its journey several hours later,

arriving at Gorleben two days later. Additional protestors along the remainder of the route forced the train to make several stops. Under agreement with the United Kingdom and France, Germany sends its spent fuel for reprocessing, but is obliged to take back the resulting waste. An es-

estimated 11 000 German police officers were deployed to guard the cargo during the transport.

- The French Parliament is holding hearings on high-level and long-lived nuclear waste policy early this year. The dates and topics for the hearings are as follows: January 20, on partitioning transmutation; January 27, on deep geological disposal (both reversible and irreversible); and February 3, on long-term interim storage. A report on management of such wastes is expected in mid-year.

- Sweden's Nuclear Power Inspectorate has recommended that the annual waste fee paid by Swedish nuclear utilities be increased by more than 100 percent, from about 0.5 öere per kilowatt-hour to 1.2 öere/kWh (or, from 0.07 to 0.17 cents U.S.). The Inspectorate recommended the fee increase to the government in part, they say, because two previous increases have been rejected and because of concern about the adequacy of fund fi-

nancing. The fund is to pay for the decommissioning of the country's 12 power reactors, plus all waste management and spent fuel disposal.

- The United Kingdom Atomic Energy Authority has slashed £1 billion (about \$1.8 billion) from the Dounreay decommissioning cost estimate and proposes to complete the job 11 years earlier (in 2036, not 2047). The primary savings come from a change in an acceptable "interim end state" for the site. With no national waste repository on the near horizon, the UKAEA had originally estimated that it could not begin removing waste from the facility until after 2040. Now, with the U.K. government's new focus on accelerated cleanup and reduced costs, the waste will instead be packaged into a "passively safe" form through treatment and repackaging, and then placed in onsite interim storage. This will enable facilities at the site to be decontaminated and dismantled on an accelerated schedule.

- South Korea is reportedly rethinking its nuclear waste management strategy, and will abandon plans for a joint low-/intermediate-level waste disposal facility and spent fuel storage facility. The government's 2003 attempt to site the dual facility resulted in a wave of protests, forcing the government to back off the project. The new thinking is that spent fuel storage capacity at reactor sites will be expanded, and that finding a host site for a repository for the LLW/ILW will be easier if there is no spent fuel involved in the project.
- The European Commission is issuing a "soft" law (that is, a non-binding one) this year designed to ensure that sufficient funds are sent aside for nuclear power plant D&D. The law further states that the funds should be available and sufficient to cover all decommissioning costs, and that they should be used for the intended purpose only and managed with complete transparency.

The EC is also proposing to change its laws on radioactive waste shipments within, into, and out of the European Union. The legislation would establish a strict control and prior authorization system on the transfers in order to cut down or eliminate illicit trafficking in radioactive materials. The new directive would replace the Euratom directive 92/3.

- French authorities have approved a new waste facility at Cadarache. The Commissariat à l'Énergie Atomique has been authorized to build CEDRA, a nuclear waste treatment and storage facility to condition Category B wastes (long-lived, intermediate-level wastes), and to store the wastes before and after conditioning. CEDRA replaces some of the CEA's old waste treatment stations at Cadarache, and is designed to accept the current inventory of stored wastes as well as all wastes projected to be produced by the CEA for the next 30 years. ■