

Proposed Fiscal 2008 DOE Budget

The U.S. Department of Energy has requested \$24.3 billion for fiscal year 2008. Of that, the department has requested \$5.7 billion for its cleanup program. This figure is down from previous years because several sites have completed cleanup over the past two years, most recently the Fernald site, where a closure ceremony was held in January (see "A Farewell at Fernald," this issue, page 26). However, the Hanford site would get a slight increase, with a 2008 request of \$1.9 billion, up some 3 percent from the fiscal 2007 request.

The Office of Civilian Radioactive Waste Management, which oversees the Yucca Mountain high-level waste repository project, has requested \$495 million, \$50 million below the fiscal 2007 request.

The Office of Nuclear Energy request of \$875 million includes \$395 million for the Advanced Fuel Cycle Initiative (AFCI), which provides technology development for the Global Nuclear Energy Partnership (GNEP) program. In addition, \$10 million is provided to GNEP from the National Nuclear Security Administration, for a total of \$405 for GNEP.

- In mid-March, DOE announced its final spending plan for fiscal year 2007. This year, because the department was funded by a continuing resolution rather than a detailed appropriation, the DOE plan does not need congressional approval of its line-by-line funding priorities.

The total DOE budget for the year is close to \$23.6 billion. Of that, the DOE's cleanup program will receive \$5.7 billion, down from \$6.3 billion in fiscal 2006. Some of this funding, however, may be cut further to pay for costs associated with closing military bases, department officials have advised Congress.

The department has allocated \$167.4 million for the Advanced Fuel Cycle Initiative (AFCI). This figure is up from the \$78.4 million appropriated in fiscal 2006.

\$56 Million Spent Fuel Settlement Negotiated

Duke Energy Carolinas has negotiated a \$56 million settlement agreement with the federal government as reimbursement for spent fuel storage costs incurred at the Oconee, McGuire, and Catawba nuclear power plants. The costs have accrued because of the failure of the U.S.

Department of Energy to take possession of the spent fuel by January 31, 1998, the date listed in the contract between the utility and the DOE. This is the fourth out-of-court settlement reached as a result of the DOE default. Other default awards have been granted through lawsuits. The nuclear industry has estimated that total default costs could reach \$1 billion.

Low-Level Waste Updates

- An effort to extend the availability of the Barnwell, S.C., low-level waste disposal facility beyond the July 1, 2008, date when the facility by law closes to out-of-com-

The effort in the South Carolina General Assembly to extend the availability of the Barnwell LLW disposal site beyond June 30, 2008, failed in committee by a 16-0 vote.

pact waste generators failed in the South Carolina General Assembly, when house bill H3545 was rejected 16-0 in committee. For details on this legislative effort, see "Low-Level Radioactive Waste Disposal: Are We Having a Crisis Yet?" this issue, page 10.

- A Government Accountability Office (GAO) report on low-level radioactive waste management issued in March looked at LLW management in other countries. The report, GAO-07-221, "Low-Level Radioactive Waste Management: Approaches Used by Foreign Countries May Provide Useful Lessons for Managing U.S. Radioactive Waste," found that most countries have national radioactive waste inventory data bases, that most countries facilitate the timely removal of the higher activity sealed sources from generator sites to enhance safety and security, that most countries say they have disposal options for lower activity waste and central storage options

for the higher activity LLW, and alternative disposal options for very low-level waste, and that half of the 18 countries surveyed impose financial assurance requirements on waste generators to cover disposition costs. The GAO also found that most countries surveyed use national radioactive waste plans to guide management of their radioactive wastes. The GAO recommended that the U.S. Nuclear Regulatory Commission and the U.S. Department of Energy evaluate and report on the usefulness of adopting the identified management approaches, and developing a U.S. radioactive waste management plan. The full report can be found on the Internet at www.gao.gov.

- The United Kingdom has announced a new policy for managing solid low-level radioactive waste. The policy's aim is to "provide a high-level framework within which individual LLW management decisions can be taken flexibly to ensure appropriate safe, environmentally acceptable and cost-effective management solutions."

Under the policy, the U.K. Nuclear Decommissioning Authority will be required to develop a plan for the optimal use of the country's LLW disposal site near Drigg, which must include an assessment of when a future replacement might be required. The site has been in operation since 1959. The plan must also take into account current and future levels of LLW generation. Generators will also be required to minimize waste through waste avoidance, volume reduction, recycling, and reuse.

- Germany's first disposal site for low- and intermediate-level waste is set to go ahead, after the Federal Administrative Court ended years of legal challenge and delay. The April 3 decision by the court exhausts the legal process and renders incontestable the site license to convert a former iron ore mine at Konrad in Lower Saxony into a waste repository. The Konrad site will hold up to 303 000 cubic meters of waste, and should enter operation in 2010.

New "Fix Yucca" Legislation Submitted; Other Yucca Mountain Updates

The Bush Administration has submitted a bill to Congress that contains a number of provisions to facilitate the licensing, construction, and operation of a repository at Yucca Mountain. Virtually identical to a bill submitted to last year's Congress, the bill would withdraw permanent-

ly from public use approximately 147 000 acres of land in Nye County, Nevada, to comply with U.S. Nuclear Regulatory Commission requirements; would repeal the statutory 70 000 metric ton capacity limitation on the repository; would provide that, if the NRC authorized construction of the repository, subsequent licensing actions would be conducted using expedited simplified procedures; would allow the DOE to make infrastructure changes, including construction of a rail line to connect the Yucca Mountain site with the national rail network, prior to receiving construction authorization for the repository; would direct federal, state, local, and Tribal officials to grant necessary rights-of-way and other authorizations; and would mandate that the Nuclear Waste Fund could be used only for authorized waste disposal activities.

Senate Majority Leader Harry Reid (D-Nev.), a strong opponent of the Yucca Mountain repository program, declared the bill "dead on arrival" on Capitol Hill.

- Budget requirements for the repository program will exceed \$1 billion annually starting in fiscal 2009, according to Ward Sproat, director of the U.S. Department of Energy's Office of Civilian Radioactive Waste Management. This projection assumes that the DOE submits the Yucca Mountain license application as planned at the end of June 2008. Budget projections peak at nearly \$2 billion around fiscal 2012, when repository construction is scheduled to begin. Another \$2 billion peak occurs in fiscal 2021, when construction of the last of the surface facilities is completed. The annual payments into the Nuclear Waste Fund, plus the interest earned on the \$19 billion already in the fund, can cover the cost of the program, Sproat said.

Decontamination & Decommissioning Updates

- The first container of remote-handled transuranic (TRU) waste was shipped on January 18 to the Waste Isolation Pilot Plant in New Mexico. The shipment originated at the Idaho National Laboratory, which plans to ship some 225 remote-handled TRU waste shipments to WIPP over the next few years.

- The U.S. Department of Energy is resurrecting a plan to vitrify 13 metric tons of surplus weapons plutonium at the Savannah River Site to make it suitable for direct dis-

posal. In late March, the DOE issued a notice that it will need to build a vitrification facility at the SRS to process the surplus plutonium that is too contaminated with other residues to be recycled into commercial fuel. The DOE has already made plans to reprocess 34 additional metric tons of surplus plutonium into commercial fuel. The new vitrification facility will cost in the \$300 million to \$500 million range.

- The U.S. Department of Energy has been fined \$1.1 million by the U.S. Environmental Protection Agency for violations associated with the operation of the Environmental Restoration Disposal Facility (ERDF), the main disposal site for contaminated soil, debris, and other low-level radioactive waste at the Hanford site. The penalties involve the failure of subcontractor employees working for Washington Closure Hanford to conduct weekly testing of the leachate collection system between May and December 2006, and failure to perform testing between June 2005 and January 2007 to assure that waste placed in the burial site was sufficiently compacted to prevent settling and other dangerous movement.

- The Energy Department is seeking industry interest for the recycling and reuse of some 15 300 tons of radioactively contaminated nickel scrap recovered during the decommissioning of uranium enrichment process equipment at the Paducah, Ky., and Oak Ridge, Tenn., sites. The DOE emphasized that the materials were not intended for unrestricted release for recycling into commerce, but rather into products suitable for use in controlled government or commercial nuclear applications, such as containers for spent nuclear fuel. Several years ago, the DOE placed a moratorium on metal recycling in the face of protests from antinuclear groups, the steel industry, and others.

- CH2M Hill Hanford Group Inc. has completed retrieval operations from Hanford single-shell tank S-112, its seventh completed retrieval of material from a Hanford single-shell tank under the regulatory requirements of the Tri-Party Agreement (TPA). S-112 is a 758 000-gallon tank placed in service in 1952. When retrieval began, in September 2003, the tank held more than 614 000 gal of saltcake waste. Several retrieval technologies were required over a three-and-a-half-year period to remove liquids, sludge, and 23 000 gal of hardened waste on the bottom of the tank known as the "heel." At the end of operations, only 2400 gal of residual waste remained in the tank, well below the 360-cubic-foot limit of the TPA.

- Industry press has reported that Maine Yankee has reached a settlement with Maine's Department of Environmental Protection to pay about \$930 000 for environmental restoration projects around the plant. Under the agreement, Maine Yankee will pay to restore a nearby salt marsh and expand a nature preserve. The utility may also remove a dam from a nearby river to ease fish passage to and from the ocean; Maine Yankee had built the dam to divert water for plant operations. Two nearby towns, however, reportedly oppose removal of the dam because of the potential loss of property tax revenue.

- The U.S. Department of Energy and the Washington State Department of Ecology are planning a surface barrier demonstration at the "T" tank farm at the Hanford site. The barrier is to go above the T-106 tank, which had the largest known leak (115 000 gallons) in June 1973, to prevent rain and snow from driving the contamination plume under the tank toward groundwater. The liner, of spray-on plastic, will be sloped to collect runoff along the margins. The runoff will then flow to an area outside the T Farm where surface contamination is not known.

International Briefs

- According to Japanese media reports, the town of Toyochō, in Kochi Prefecture, has volunteered to host a high-level radioactive waste repository. Japan's Nuclear Waste Management Organization has been soliciting local governments to volunteer as site candidates since 2000, when it was established. However, a survey of Toyochō residents reportedly indicates that 60 percent of them oppose the decision by the town's government to volunteer to host the facility.

- The United Kingdom's Nuclear Decommissioning Authority will receive £2.47 billion (\$4.94 billion) in funding for fiscal 2007–2008. This figure represents a small increase from the fiscal 2006–2007 budget and will enable the agency to continue its high level of spending on its nuclear cleanup program.

- The United Kingdom Atomic Energy Authority was fined £140 000 (around \$280 000) by a Scottish court for illegally dumping radioactive waste at its Dounreay site and discharging small fuel fragments into the nearby sea. The UKAEA admitted the charges in early February. The incidents took place at various times between 1963 and 1984. ■