Yucca Mountain Updates

- The U.S. Nuclear Regulatory Commission has resolved 29 technical questions related to the U.S. Department of Energy's license application for the Yucca Mountain repository. The NRC also issued a report summarizing the past two years of staff progress in its prelicensing technical review. The NRC's recent actions bring the total number of completed technical issue agreements to 167 (of 293 identified). The DOE had originally scheduled the submission of its license application for the end of December 2004, but has extended the submission date to sometime in 2005.
- The U.S. Department of Energy is expected to ask for \$650 million for the Yucca Mountain high-level waste repository program in fiscal 2006. The request, while greater than the fiscal 2005 appropriation of \$577 million, is still short of the nearly \$800 million that the DOE had requested for fiscal 2005, and thus may reflect a delay in the repository program. (DOE budget projections in previous years had put annual expenditures for the program at some \$1 billion by this time.) The budget request was expected to contain language to reclassify the nuclear waste fund as a user fee, which would allow the DOE to tap into the \$750 million collected in the fund each year. An attempt to reclassify the fund last year failed to win legislative support. Industry insiders are speculating that the repository program will be hit with some 150–200 layoffs later in the year because of the reduced funding.
- The NRC expected to issue a final rule in January tightening access to classified information for those involved in licensing or other regulatory work for high-level waste repository and new reactor activities. The rule would widen the circle of individuals who need to get security clearance before they can access certain information. The current regulations do not specifically reference construction licenses and licenses for high-level waste disposal in repositories in general, or at the potential facility at Yucca Mountain, Nev.
- The 2005 Yucca Mountain appropriation states that local governments in Nevada can use U.S. Department of Energy grants to take part in upcoming licensing proceedings for the proposed Yucca Mountain repository. Nine Nevada counties and Inyo County in California shared \$4 million in fiscal 2004 and are due to receive \$8 million during fiscal 2005 to monitor DOE work at Yucca Mountain.
- Outgoing Energy Secretary Spencer Abraham has admitted that the recent appeals court decision tossing out the U.S. Environmental Protection Agency's radiation standard for Yucca Mountain "puts doubt into the timetable" for opening the repository by 2010. Abraham declined to provide a new operating date.

Spent Fuel Storage

- In December 2004, the U.S. Nuclear Regulatory Commission approved a 40-year license renewal for the dry cask storage system at Dominion Generation's Surry nuclear power plant. This is the first license renewal the NRC has granted to an independent spent fuel storage installation (ISFSI). In approving the new license, the NRC commissioners agreed to exempt the Surry ISFSI from current regulations, which specific a license term of 20 years, not 40. The Commission also directed the staff to grant a similar exemption for the Robinson-2 ISFSI license renewal application, now under NRC review. The Commission also told the staff to explore potential rulemaking extending the current ISFSI license term to 40 years.
- The NRC also has renewed the operating license for General Electric Co.'s spent fuel storage facility in Morris, Ill. The 20-year extension is the first NRC renewed license for an "away-from-reactor" pool storage facility. All the fuel at the Morris facility has been cooled for more than 20 years, and the license does not authorize the receipt of any additional fuel.
- Federal spent fuel storage facilities could provide backup if the Yucca Mountain repository is delayed or derailed, according to a report from the National Commission on Energy Policy, an independent bipartisan body composed of officials from industry, government, labor, academia, and environmental and consumer groups. The report stressed the importance of nuclear power in the country's energy mix, and the commission proposed that at least two federal storage facilities (one east and one west of the Mississippi River) could provide hubs from which utility spent fuel could be shipped to a repository, as well as provide a backup to the disposal facility.

Private Fuel Storage Licensing Decision Delayed

The U.S. Nuclear Regulatory Commission's Atomic Safety and Licensing Board hearing the Private Fuel Storage LLC (PFS) case pushed into February its decision on the last pending item in the licensing procedure. The ASLB had originally anticipated handing down the decision in mid-January. The last issue deals with the consequences of an accidental military jet crash into the proposed 4000-cask spent fuel storage facility, which PFS wants to build on Tribal land in the state of Utah. The delay is being caused by some last-minute filings from the state, which opposes

the facility. If the ASLB ruling is favorable to PFS, the NRC will be able to make the final decision on whether to issue the license to construct and operate the facility. PFS first applied for the license in June 1997.

• In other PFS news, the U.S. Supreme Court has asked for feedback from the Bush Administration on whether Utah can block PFS from siting the repository in the state if the federal government has exclusive control over the storage and transportation of spent nuclear fuel. The court has neither accepted nor rejected an appeal filed by Utah, but instead is seeking additional information, which is customary when the federal government has not made its position known, according to a PFS attorney.

International Briefs

- No charges have been filed in connection with the November death of a protestor who had chained himself to the tracks and then was run over by a train carrying vitrified high-level waste from France to Gorleben in Germany. (See "Headlines," *Radwaste Solutions*, Jan./Feb. 2005, p. 7.) The investigation by the public prosecutor in France showed several dysfunctions in the organization of the group of protestors, who didn't realize how close the train was to the people who had chained themselves to the tracks. According to Agence France Presse, the investigation also showed that seven of the eight protestors had smoked cannabis prior to the protest action.
- Yves Le Bars has told the French government he no longer wishes to continue serving as interim chairman of the French nuclear waste agency ANDRA. Le Bars had been named to a five-year term as chairman on December 15, 1998; he continued serving in the position all last year, one year past his term's end, at the request of the current government.
- Decision-making on new nuclear plants in the United Kingdom should not be held hostage by delays in formulating long-term nuclear waste management strategies, according to a U.K. House of Lords' Select Committee on Science and Technology report issued in December. The committee deplored the lack of progress by the government in finding a waste management solution. The report also stressed the fact the modern reactors produce significantly lower volumes of waste, so any new U.K. program would add relatively little waste to the stockpiles currently existing. Nonetheless, the report did acknowledge that "it is clearly desirable that there should at least be a plan for the long-term management of waste as a preliminary to new build."
- Swedish utilities should pay more into the nuclear waste and spent fuel handling fund to ensure that there is suffi-

cient money in the fund through 2050, according to a report from a government-appointed reviewer. Under the current system, the report notes, utilities will stop paying into the fund before the waste and spent fuel from the country's 12 reactors is completely disposed of, and there is a risk that the government will have to bear some of the costs. Under Swedish law, the utilities are responsible for all waste management and spent fuel disposal costs.

- The U.K. Government has authorized a new waste substitution policy to allow overseas reprocessing customers to receive their reprocessed waste back as smaller quantities of high-level waste rather than bulkier, radiologically equivalent quantities of intermediate-level waste. This will allow the HLW to be returned more quickly, by 2017 rather than 2033 as originally planned. The United Kingdom will keep all the overseas customers' ILW within the U.K., sending back a radiologically equivalent amount of HLW. The customers will pay extra for this service, and the U.K. will use the added income to help clean up the U.K.'s civilian nuclear sites.
- The United States has extended by ten years, to 2016, its program to take back research reactor fuel, due to delays in developing new high-density low-enriched fuel to replace the high-enriched fuels currently being used around the world. Many of the 107 research reactors using the older fuel will need to continue to do so for some time. The scope of the take-back program has also been expanded to include low-enriched fuel from the new Australian research reactor. So far, the U.S. Department of Energy has received only 35 percent of the fuel available for the program—involving some 30 shipments and 27 countries.
- Three projects for nuclear waste cleanup and spent fuel storage at Andreeva Bay in northwest Russia were officially commissioned in early December. The projects, built by Norway and the United Kingdom at a cost of about \$1.3 million, include mobile radiation measurement laboratories and units for monitoring radiation exposure of site personnel. A cover over one of three spent fuel storage pools was also built, to prevent water ingress. Some 12 other projects to provide further infrastructure at Andreeva Bay are still going on. More than 10 000 tons of solid nuclear waste, 600 cubic meters of liquid waste, and 50 trains loaded with spent fuel are stored at the Andreeva Bay site.

In related news, Russian and Norwegian officials have agreed to start a bilateral radiation monitoring program focusing on northwest Russia and the area in Norway bordering that region. The monitoring program, expected to start this year, will be administered by Roshydromet, which is responsible for environmental protection in Russia, and by the Norwegian Radiation Protection Authority.