

## POLICY ISSUE

### (Information)

November 30, 2007

SECY-07-0209

FOR: The Commissioners  
FROM: Luis A. Reyes  
Executive Director for Operations /RA/  
SUBJECT: STATUS OF DECOMMISSIONING PROGRAM—2007 ANNUAL REPORT

PURPOSE:

This Commission paper provides the Commission with the staff's 2007 Annual Report on the Status of the Decommissioning Program, the highlights of key decommissioning accomplishments in fiscal year (FY) 2007, as well as an outlook of activities for FY 2008. This paper does not address any new commitments or resource implications.

BACKGROUND:

In the staff requirements memorandum to SECY-04-0024, "Recommended Changes to NRC's Decommissioning Program and Annual Decommissioning Program Report," dated March 12, 2004, the Commission approved several changes to the annual decommissioning report, including the publication of the annual report as a NUREG every 2 years. The Commission directed the staff to publish the report in odd-numbered years as a shortened report to the Commission, with reference to the decommissioning Web site.

Enclosed is an Operational Effectiveness Chart (Enclosure 1), which details a nine year trend of site completions from the Decommissioning Program. Enclosure 2, the 2007 Annual Report on the Status of the Decommissioning Program, provides a comprehensive summary of the Decommissioning Program of the U.S. Nuclear Regulatory Commission (NRC). The report summarizes the status of all sites undergoing decommissioning activities since the last report,

CONTACTS: Richard Chang, FSME/DWMEP  
(301) 415-7188

Giorgio Gnugnoli, FSME/DWMEP  
(301) 415-7432

through September 30, 2007, including the decommissioning of complex materials sites, commercial reactors, research and test reactors, uranium recovery facilities, and fuel cycle facilities. The report also discusses highlights in the Decommissioning Program since last year's report (NUREG-1814, "Status of the Decommissioning Program—2006 Annual Report," Revision 1, issued February 2007), and it informs the Commission of decommissioning issues that the staff will address in the coming year.

**DISCUSSION:**

**Summary of Status Update for FY 2007**

Decommissioning activities were completed at 11 sites in FY 2007: two reactors (Big Rock Point and Yankee Rowe); three research and test reactors (Cornell-TRIGA, Cornell-ZPR, and University of Washington); and six complex materials sites (Eglin Air Force Base, Kaiser Aluminum, Pathfinder Atomic Plant, Royersford Wastewater Treatment facility, S.C. Holdings Inc., and Westinghouse Electric-Churchill). This yields a 2-year total of 19 sites that have completed decommissioning activities.

In addition, substantial progress was made at several complex materials sites (ABB Prospects, Inc., Mallinckrodt Chemical, Inc., Salmon River, and West Valley) that have languished over the past years. Specifically, the staff worked with the U.S. Army Corps of Engineers (USACE) to create an interagency protocol for the cleanup of contaminated areas at the ABB Prospects, Inc., site. At Mallinckrodt Chemical, Inc., the staff is working with the licensee and the USACE to pursue the cleanup of Formerly Utilized Sites Remedial Action Program waste and licensed waste. Additionally, the staff worked with the U.S. Environmental Protection Agency to secure decommissioning funding for the Salmon River site. Finally, to resolve issues at the West Valley Demonstration Project, a core team comprised of representatives from different agencies was created to resolve technical issues for the development of a draft environmental impact statement for the site. The core team has developed an approach for implementing phased decommissioning. These activities represent significant progress towards the completion of decommissioning at these complex sites.

The total number of sites undergoing decommissioning in Agreement States has increased from the 48 reported in NUREG-1814, "Status of the Decommissioning Program—2006 Annual Report," Revision 1, to 58 in the current annual report. This increase is mainly a result of improved reporting and implementation of the Naturally-Occurring and Accelerator-Produced Radioactive Material (NARM) rulemaking. This data was obtained by working closely with the Agreement States to get more detailed information about the complex materials sites and uranium recovery sites undergoing decommissioning regulated by the Agreement States.

Finally, the Office of Management and Budget and the NRC completed a Program Assessment Rating Tool (PART) review in FY 2007 of the Decommissioning and Low-Level Waste Program. The primary focus of PART is on demonstrating program improvements. PART also establishes accountability for program performance. The scope of the PART review for the Decommissioning and Low-Level Waste Program included the NRC's regulatory activities for the decommissioning of power reactors, test and research reactors, complex materials sites, uranium recovery sites and Low-Level Waste. The Decommissioning and Low-Level Waste Program was rated "effective" under the PART evaluation.

FY 2008 Outlook

As noted below, several new events/initiatives are planned for FY 2008. These include: the Comprehensive Decommissioning Program; inclusion of sites contaminated with discrete sources of NARM in the Decommissioning Program; working with the Department of Defense on sites contaminated with depleted uranium (DU); and the prevention of future legacy sites.

- The Comprehensive Decommissioning Program will allow the NRC to compile, in a centralized and accessible location, more complete information on the status of decommissioning and decontamination of complex materials and uranium recovery sites in the United States – sites regulated by NRC or the Agreement States – in order to provide a national perspective on decommissioning. This will play an important role in the prevention of future legacy sites.
- The staff anticipates that Pennsylvania will become an Agreement State in FY 2008. Consequently, the staff is holding quarterly conference calls with the Pennsylvania Department of Environmental Protection (PADEP) to discuss the status at complex sites. Additionally, the staff invites PADEP to observe NRC inspections. When Pennsylvania becomes an Agreement State, the NRC may transfer as many as seven complex materials sites to the State.
- The Energy Policy Act of 2005 expanded NRC regulatory authority over certain accelerator-produced radioactive materials, discrete sources of radium, and discrete sources of naturally-occurring radioactive materials. The staff will be working to implement the final NARM rule in FY 2008 to address the decommissioning of facilities contaminated with discrete sources of radium.
- The Department of Army has recently identified DU contamination at two Army bases from the use of DU munitions in the 1960s ( Schofield Army Barracks, Hawaii and Fort Hood, Texas). These locations are not currently licensed by the NRC. The Army has also indicated that as many as seven additional locations have been identified at other Army bases, which will be further investigated. During the upcoming year, the staff will be working with the Army to determine the need for licensing the contaminated sites and, if necessary, plans for future remediation.

As the decommissioning program matures, the staff is redefining the program's role to focus on preventing future sites that are unable to complete decommissioning. In this regard, the staff prepared SECY-07-0177, "Proposed Rule: Decommissioning Planning (10 CFR Parts 20, 30, 40, 50, 70 and 72: RIN: 3150-AH45)," dated October 3, 2007, which is a two-pronged approach consisting of financial assurance and monitoring. The first revises the requirements of Title 10 of the *Code of Federal Regulations* (CFR) Parts 30, 40, 70, and 72 to strengthen financial assurance. The second revises 10 CFR 20.1406 to require existing licensees to minimize contamination and perform monitoring, if necessary. Additionally, the staff is working to improve broad-scope licensees' understanding of the Decommissioning Timeliness Rule and associated decommissioning-related regulations and on guidance to help prevent future legacy sites.

A significant reduction in active NRC decommissioning sites is expected after FY 2010 due to successes in decommissioning of sites, many States becoming Agreement States, and the reduction in nuclear reactors and research and test reactors entering into decommissioning. In FY 2008, the staff will evaluate the resource impacts of this reduction in sites, as well as the increasing number of uranium recovery licensing activities (uranium recovery is also managed under the Decommissioning and Low-Level Waste Tier II Program). Given that the technical disciplines of health physics, hydrology, and performance assessment are common to both the regulation of decommissioning sites and uranium recovery, the staff intends to begin to modify its staffing strategy to accommodate the trends in decommissioning and uranium recovery.

**CONCLUSION:**

The staff plans to continue its close oversight of the decommissioning of nuclear power reactors, research and test reactors, complex materials sites, and uranium recovery facilities. In addition, the staff plans to develop programmatic activities that will aid in the protection of public health and safety, as well as the prevention of future legacy sites, while ensuring the efficient and effective use of resources.

Site summaries for all decommissioning sites are accessible to the Commission and the public through the NRC's Decommissioning Web site (<http://www.nrc.gov/about-nrc/regulatory/decommissioning.html>). To ensure that the Web site is current, project managers in the Office of Federal and State Materials and Environmental Management Programs, the Office of Nuclear Material Safety and Safeguards, and the Regions routinely review and update the program information.

**COORDINATION:**

The Office of the General Counsel has reviewed this paper and has no legal objections. The Office of the Chief Financial Officer has reviewed this paper and has no objections.

/RA/

Luis A. Reyes  
Executive Director  
for Operations

Enclosures:

1. Operational Effectiveness Chart
2. 2007 Annual Report

A significant reduction in active NRC decommissioning sites is expected after FY 2010 due to successes in decommissioning of sites, many States becoming Agreement States, and the status of the decommissioning of nuclear reactors and research and test reactors. In FY 2008, the staff will evaluate the resource impacts of this reduction in sites, as well as the increasing number of uranium recovery licensing activities (uranium recovery is also managed under the Decommissioning and Low-Level Waste Tier II Program). Given that the technical disciplines of health physics, hydrology, and performance assessment are common to both the regulation of decommissioning sites and uranium recovery, the staff intends to begin to modify its staffing strategy to accommodate the trends in decommissioning and uranium recovery.

#### CONCLUSION:

The staff plans to continue its close oversight of the decommissioning of nuclear power reactors, research and test reactors, complex materials sites, and uranium recovery facilities. In addition, the staff plans to develop programmatic activities that will aid in the protection of public health and safety, as well as the prevention of future legacy sites, while ensuring the efficient and effective use of resources.

Site summaries for all decommissioning sites are accessible to the Commission and the public through the NRC's Decommissioning Web site (<http://www.nrc.gov/about-nrc/regulatory/decommissioning.html>). To ensure that the Web site is current, project managers in the Office of Federal and State Materials and Environmental Management Programs, the Office of Nuclear Material Safety and Safeguards, and the Regions routinely review and update the program information.

#### COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objections. The Office of the Chief Financial Officer has reviewed this paper and has no objections.

/RA/

Luis A. Reyes  
Executive Director  
for Operations

Enclosures:

1. Operational Effectiveness Chart
2. 2007 Annual Report

ML071930270

WITS 199900100/EDATS: SECY-2007-0470

OFC	DWMEP	DWMEP	DWMEP	DWMEP	FSME/DWMEP	FSME/DWMEP
NAME	RChang	GGnugnoli	LChang	BWatson	RTadesse (J Hayes for)	BVonTill (SCohen for)
DATE	07/12/07	07/12/07	10/10/07	09/ 20 /07	09/27/07	09/28/07
RIV	RIII	RI	CFO	OGC	FCSS	RES
BSpitzberg	PLouden	RLorson (MBeardsley for)	TCroote	FCameron	MTschiltz	WOtt
09/27/07	09/27/07	09/28/07	09/27/07	10/03/07	10/01/07	10/01/07
DMMSA	DWMEP	DWMEP	TechEd	TechEd	FSME	EDO
DWhite	KMcConnell	LWCamper	LCulp	CPoland	CMiller (GPangburn for)	LAReyes
09 /20/07	11/02/07	11/8/07	9/12/07	11/14/07	11/19/07	11/30/07

OFFICIAL RECORD COPY