

POLICY ISSUE **(Information)**

November 14, 2016

SECY-16-0129

FOR: The Commissioners

FROM: Marc L. Dapas, Director
Office of Nuclear Material Safety
and Safeguards

SUBJECT: STATUS OF THE DECOMMISSIONING PROGRAM—2016 ANNUAL
REPORT

PURPOSE:

To provide the U.S. Nuclear Regulatory Commission (NRC) staff's 2016 Annual Report on the Status of the Decommissioning Program, the highlights of key decommissioning accomplishments in Fiscal Year (FY) 2016, as well as an outlook of activities for FY 2017. This paper does not address any new commitments or resource implications.

BACKGROUND:

The Staff Requirements Memorandum (SRM) to COMSECY-08-0036, "Status of Decommissioning Program—2008 Annual Report," dated January 8, 2009, (Agencywide Documents Access and Management System Accession No. ML090080223), stated that the NRC staff should discontinue publication of the annual report on the status of decommissioning in NUREG-1814, and instead publish an annual SECY paper on the status of the decommissioning program with information substantially equivalent to that contained in the 2008 Annual Report. In accordance with this SRM, the 2016 Annual Report is provided to the Commission for information.

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Since 2002, an annual update regarding the status of sites with inadequate financial assurance has been provided to the Commission. Beginning with the 2017 update, NRC staff plans to provide the Annual Update on the Progress and Future Plans for Decommissioning Sites with Inadequate Financial Assurance to the Commission as an enclosure to this report.

The enclosed 2016 Annual Report on the Status of the Decommissioning Program provides a summary of the NRC's decommissioning program. The report summarizes the status of sites undergoing decommissioning through September 30, 2016, including the decommissioning of complex materials sites, power reactors, research and test reactors, uranium recovery facilities, and fuel cycle facilities. The report also discusses highlights in the decommissioning program, and informs the Commission of decommissioning issues that NRC staff will address in FY 2017.

DISCUSSION:

Summary of Status Update for FY 2016

As of September 30, 2016, 19 nuclear power and early demonstration reactors, 4 research and test reactors, 13 complex materials facilities, 2 fuel cycle facilities (partial decommissioning), and 11 Title II¹ uranium recovery facilities are undergoing decommissioning or are in long-term safe storage, under NRC jurisdiction. Of the 19 power reactors in decommissioning, 13 are in SAFSTOR and 6 are in active decommissioning. Additionally, 22 Title I and 6 Title II uranium recovery facilities are in long-term care under a general license held by the U.S. Department of Energy (DOE), pursuant to 10 CFR 40.27 and 40.28. In FY 2016, progress continued at complex materials sites, including some sites where decommissioning had long been delayed. In February 2016, NRC staff terminated materials licenses for the Stepan Company site in Maywood, NJ, and the Mallinckrodt site in St. Louis, MO, and released both sites for unrestricted use. Considerable progress was made in research and test reactor decommissioning, where NRC staff terminated the license for the U.S. Department of Veterans Affairs reactor in Omaha, NE, and decommissioning work neared completion for the reactor at the State University of New York at Buffalo in Buffalo, NY.

Staff completed the transfer of project management from the Office of Nuclear Reactor Regulation (NRR) to the Office of Nuclear Material Safety and Safeguards (NMSS) for Vermont Yankee, and coordinated with NRR and regional offices regarding announced future power reactor shutdowns.

As noted in last year's report, the decommissioning program has adapted to new programmatic issues. Examples include the regulation of military sites contaminated with depleted uranium from past testing of munitions and military sites with radium contamination and other material cited in the Atomic Energy Act of 1954, as amended, that is subject to the NRC's regulatory authority. In FY 2016, NRC staff continued its work on the licensing of U.S. Army installations possessing depleted uranium from the Davy Crockett weapon system. NRC staff issued Amendment 1 to License SUC-1593 in March 2016, which incorporated 15 additional U.S. Army installations throughout the United States that also possess this depleted uranium.

¹ Title I refers to facilities under the Uranium Mill Tailings Radiation Control Act of 1978, as amended, that were inactive, unregulated processing sites when the act was passed, while Title II facilities are those facilities licensed by the NRC or an Agreement State.

In FY 2016, NRC staff continued interactions with the military services, as directed by the Commission in SRM-SECY-08-0077, "Options for U.S. Nuclear Regulatory Commission Involvement with the Navy's Remediation of the Hunters Point Naval Shipyard Site in California," to stay informed of the clean-up, which is ongoing under U.S. Environmental Protection Agency (EPA) oversight. In April 2016, a Memorandum of Understanding (MOU) between the NRC and the U.S. Department of Defense was finalized to address the NRC's role at sites with unlicensed Atomic Energy Act of 1954, as amended, material being remediated under the Comprehensive Environmental Response, Compensation, and Liability Act. In summer 2016, implementation of the MOU began with an initial site inventory and monitoring at pilot sites. The initial use of pilot sites, as discussed in SECY-14-0082, "Jurisdiction for Military Radium and the U.S. Nuclear Regulatory Commission Oversight of U.S. Department of Defense Remediation of Radioactive Material," will allow NRC to gain experience with the terms of the MOU. This stay informed approach for the Hunters Point, McClellan, and Alameda sites, along with future sites, will continue under the MOU.

Another area of focus and progress that continued in FY 2016 involved non-military sites with radium contamination. NRC staff has been coordinating with the National Park Service regarding the ongoing remediation of the Great Kills Park site, located in Staten Island, NY, and has worked closely with EPA Region 1 regarding their cleanup activities at the former Waterbury Clock factory located in Waterbury, CT. NRC staff has identified and prioritized non-military sites with potential radium contamination due to historical manufacturing of consumer products, and began coordinating with Agreement and non-Agreement States to share information about these sites. Additional activities related to non-military radium are discussed below.

Activities in Fiscal Year 2017 and Beyond

In FY 2017, progress in power and early demonstration reactor decommissioning is expected to continue at a similar level while the number of sites will continue to increase. Fort Calhoun, Clinton, Quad Cities, Pilgrim, and Oyster Creek have expressed their intent to permanently cease power operations by 2019 or sooner. NRC staff expects that decommissioning activities will be completed at Humboldt Bay in FY 2017.

Progress in research and test reactor decommissioning will continue in FY 2017, with the State University of New York at Buffalo facility continuing to work toward license termination. Progress will also continue at complex materials sites in FY 2017, as decommissioning activities are expected to be completed at Beltsville Agricultural Research Laboratory. NRC staff also expects the completion of remediation activities at the Sequoyah Fuels site in Gore, OK, in FY 2017. The transfer of this site and others (e.g., Pathfinder—Lucky Mc) to DOE for long-term surveillance is expected to occur within the next few years.

The overall decrease in inventory of sites due to the successful completion of decommissioning is expected to be offset by emerging programmatic responsibilities, such as follow-up actions related to the identified non-military sites with potential radium contamination. In October 2016, NRC staff issued a letter to the States (STC-16-080), which provided background information on the identification of these sites and the NRC's approach in both Agreement and non-Agreement States. NRC staff also began its outreach to site owners in non-Agreement States in October 2016 to determine if follow-up actions are warranted at any of the identified sites. Follow-up actions may include conducting radiological surveys, establishing site access controls, and working with site owners on remediation, where applicable. NRC staff will also continue its

monitoring role at additional military radium MOU sites in FY 2017, as discussed in SECY-14-0082.

In FY 2017, NRC staff will also begin oversight of decommissioning activities at the Centrus Fuel Facility in Piketon, OH, and continue to support the integrated rulemaking effort for reactor decommissioning.

CONCLUSION:

NRC staff plans to continue its licensing activities and close oversight of the decommissioning of nuclear power reactors, research and test reactors, complex materials sites, uranium recovery facilities and fuel cycle facilities. In addition, NRC staff plans to continue to identify and implement methods to make the decommissioning program more efficient and effective.

Site summaries for all decommissioning sites are accessible to the Commission and the public through NRC's decommissioning website (<http://www.nrc.gov/waste/decommissioning.html>). To ensure that the website is current, project managers in NMSS and the regional offices routinely review and update the facility 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 for resource implications and has no objections.

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ADAMS Accession No. ML16285A197			SRM-S14-0082-2		WITS 200900003	
OFFICE	DUWP	DUWP	DUWP	Region I	Region III	Region IV
NAME	K. Conway	S. Achten	B. Watson	R. Powell	M. Kunowski	R. Kellar
DATE	10/5/16	10/13/16	10/20/16	10/21/16	10/18/16	10/17/16
OFFICE	OGC	OCFO	DUWP	NMSS	NMSS	
NAME	M. Spencer	R. Allwein	J. Tappert (C. McKenney for)	W. Moore	M. Dapas	
DATE	10/25/16	10/19/16	10/28/16	10/28/16	11/14/16	

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