POLICY ISSUE
(Information)

November 20, 2023

FOR: The Commissioners SECY-23-0098

FROM: John W. Lubinski, Director
Office of Nuclear Material Safety
and Safeguards

SUBJECT: STATUS OF THE DECOMMISSIONING PROGRAM—2023 ANNUAL REPORT

PURPOSE:

To provide the U.S. Nuclear Regulatory Commission (NRC) staff's 2023 annual report on the status of the Decommissioning Program, key decommissioning accomplishments in fiscal year (FY) 2023 and expected activities for FY 2024. This paper does not address any new commitments or resource implications.

BACKGROUND:

Since 2008, and consistent with Staff Requirements Memorandum (SRM)-COMSECY-08-0036, "Staff Requirements—COMSECY-08-0036—Status of Decommissioning Program—2008 Annual Report," dated January 8, 2009 (Agencywide Documents Access and Management System Accession No. ML090080223), the staff has provided the Commission with an annual report on decommissioning.

Enclosure 2 transmitted herewith contains Official Use Only-Sensitive Internal Information. When separated from Enclosure 2, this transmittal document is decontrolled.

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The enclosed “Status of the Decommissioning Program: 2023 Annual Report” (enclosure 1) provides an overview of the NRC’s Decommissioning Program. The report summarizes the status of sites undergoing decommissioning, including the decommissioning of power reactors, research and test reactors, complex materials sites, uranium recovery facilities, and fuel cycle facilities. The report also describes key decommissioning accomplishments in FY 2023 and describes expected activities for FY 2024.

In addition, since 2002, the NRC staff has provided an annual update to the Commission about the status of sites with inadequate financial assurance, as discussed in SECY-02-0079, “Financial Analysis and Recommendations to Facilitate Remediation of Decommissioning Sites in Non-Agreement States” dated May 13, 2002 (ML020950118) and approved by the Commission in the associated SRM dated October 21, 2002 (ML022940653). In FY 2017, the NRC staff began providing this information to the Commission as an enclosure to this report, as discussed in SECY-16-0126, “2016 Annual Update: Progress and Future Plans for Decommissioning Sites with Inadequate Financial Assurance” dated November 2, 2016 (ML16257A529). Enclosure 2 of this paper provides the staff’s annual update on the status of sites with inadequate financial assurance.

DISCUSSION:

Status Update for Fiscal Year 2023

As of September 30, 2023, the NRC is overseeing the decommissioning of 25 nuclear power and early demonstration reactors, 2 research and test reactors, 8 complex materials facilities,[1] 5 Title II uranium recovery facilities, and a partial site decommissioning of 1 fuel facility.

Of the 25 power and early demonstration reactors in decommissioning, 7 have chosen the SAFSTOR (long-term storage) option and 18 have chosen the DECON (active decommissioning) option. The inventory of decommissioning power reactor sites dropped to 25 with the termination of the license for the La Crosse Boiling Water Reactor.

In addition, 19 of the 22 Uranium Mill Tailings Radiation Control Act of 1978, as amended (UMTRCA), Title I legacy uranium recovery sites and 6 UMTRCA Title II sites are regulated under a general license held by the U.S. Department of Energy (DOE).[2] Three of the Title I sites that are currently undergoing remediation by the DOE are not regulated under a general license because they are not disposal sites, but have been designated as Title I sites by Congress.

On February 15, 2023, the NRC issued a license amendment (ADAMS Accession Number ML23023A118) for the United Nuclear Corporation Church Rock, New Mexico site to construct a disposal cell for mine spoils atop the existing mill tailings cell. This was the culmination of years of regulatory, technical, and environmental engagement with other Federal, State, local, and tribal government organizations, the public, and other stakeholders, and included innovative outreach approaches with the Navajo Nation such as radio broadcasts in English and Diné, and senior manager engagement with the Navajo Nation president.

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[1] Complex materials sites are defined as sites where the complexity of the decommissioning process will require more than minimal technical and administrative support.

[2] “Title I” in this report refers to facilities under UMTRCA that were inactive, unregulated processing and disposal sites when the act was passed, while “Title II” refers to facilities that were licensed by the NRC or an Agreement State in 1978 or after UMTRCA was enacted.

Activities in Fiscal Year 2024 and Beyond

The NRC staff recently completed and issued the Zion Nuclear Power Station, Units 1 and 2, partial site release request for unrestricted use on November 8, 2023. The staff will continue or start the review of the license termination plans for the following: Crystal River Nuclear Generating Plant, Unit 3; Vermont Yankee Nuclear Power Station; Oyster Creek Nuclear Generating Station; Nuclear Ship Savannah; General Electric Hitachi Vallecitos Boiling Water Reactor; Pilgrim Nuclear Power Station; and Fort Calhoun.

The NRC staff will continue to make progress in the decommissioning of complex materials sites. The U.S. Environmental Protection Agency (EPA) added the Fansteel site, located in Muskogee, Oklahoma, to the National Priorities List (NPL) effective October 10, 2023. NRC staff coordination with the licensee, the EPA, the Oklahoma Department of Environmental Quality (ODEQ), and other agencies and stakeholders will continue in 2024 to address questions and concerns about near-term and long-term remedial activities under the NRC license and NPL process. The staff will also continue its review of the new work plans for the Shallow Land Disposal Area of BWXT's site in Vandergrift, Pennsylvania to support the start of remediation in 2025 by the U.S. Army Corps of Engineers.

The NRC staff will continue implementing the memorandum of understanding (MOU) with the U.S. Department of Defense for military radium sites by prioritizing activities based on available resources. Factors for consideration in prioritizing annual monitoring activities include: (1) the involvement of other regulatory agencies; (2) the use of engineered controls or land use controls as remedies; (3) contamination in buildings for reuse; (4) the amount or type of material and how transportable it is; and (5) previous monitoring activities.

The NRC staff plans to continue its efforts on non-military radium sites by working with site owners and state governments on risk-informed approaches for cleanup. Additionally, the NRC staff will continue to coordinate remediation activities with the U.S. National Park Service at the Great Kills Park, Spring Creek Park, and Dead Horse Bay sites in New York under the existing MOU between the agencies.

The NRC staff will continue to participate in activities associated with the Navajo Nation 10-year plan. Additionally, the staff will review DOE reports and plans for the reclamation and management of these sites.

The NRC staff continues the reviews of the groundwater corrective action plans for the Gunnison and Rifle sites in Colorado and the Green River site in Utah. The staff will continue to work with the DOE to resolve issues associated with the Bluewater and L-Bar sites in New Mexico and will work with the State of Wyoming to explore and implement options for decommissioning the American Nuclear Corporation site in Wyoming. The staff will also work with the DOE to complete the license termination and site transfer to DOE for long-term care of the Western Nuclear Inc. (Wyoming) and Durita (Colorado) sites.

CONCLUSION:

In FY 2023, the NRC staff continued to oversee safe decommissioning across the Decommissioning Program. The NRC public website has status summaries for the facilities managed in the Decommissioning Program (https://www.nrc.gov/waste/decommissioning.html).

These summaries, which are updated annually and when significant changes in status occur, describe the status of each site, and identify the major technical and regulatory issues affecting the completion of decommissioning.

COORDINATION:

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

Signed by Lubinski, John
on 11/20/23

John W. Lubinski, Director
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Enclosures:
1. Status of the Decommissioning Program: 2023 Annual Report
2. 2023 Annual Update of Decommissioning Sites with Financial Assurance Issues (nonpublic)

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