

Enclosure 1

Decommissioning, Uranium Recovery and Waste Programs (DUWP) Operating Experience Report FY2023

1. Introduction

The objective of the DUWP Operating Experience (OpE) report is to provide an analysis to identify trends in operational data and to make recommendations to improve our regulatory programs.

By systematically reviewing operational data and assessing its significance, the US Nuclear Regulatory Commission (NRC) is aiming to provide insights that can inform future inspections and licensing reviews, provide timely and effective communication to stakeholders, and apply the lessons learned to regulatory decisions and programs.

The scope of the assessment is the 2023 fiscal year and trends from previous years.

2. Data Assessment

Reported Events

Events are reported under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20 and the required reports based on the license requirements and specific regulations for the site.

No violations, reportable or non-reportable events were reported relevant to safety and security for the complex material decommissioning, low-level waste or uranium recovery sites. Based on courtesy reports, required events reports, and inspection findings, several issues have been identified in the reactor decommissioning area and are discussed below.

Part 21 Reports

No Part 21 reports were received pertaining to the business line.

Enforcement

Holtec Decommissioning International (HDI) sites, Oyster Creek received a Severity Level III Notice of Violation (NOV) for a radioactive shipping event, Indian Point received three (3) Severity Level IV Non-Cited Violations (NCV)s, one (1) related to failing to perform a fire loop flow surveillance test within the required periodicity, one (1) for failing to perform an adequate survey, and one (1) related to design control as design control measures for the Hi-Lift crane did not provide for verifying the adequacy of design, and Pilgrim received three (3) 10 CFR Part 37 Severity Level IV NCVs related to physical protection issues.

Region 1 and DUWP staff are evaluating Safety Culture issues at Crystal River and may take additional action during FY24.

The staff are investigating the use of Decommissioning Trust Funds for non-decommissioning expenses. Region 1 and Region 3 in conjunction with the Financial Assurance Branch has initiated discussions in accordance with IP 71801, *Decommissioning Performance and Status Reviews at Permanently Shutdown Reactors*.

Trending and Review

Fire Protection at Decommissioning Power Reactors

During the past few year(s), there have been repetitive fire events reported at reactor decommissioning sites. In September 2023, to inform licensees of fire protection events, the staff issued Information Notice 2023-04, “*Operating Experience Related To Fire Events at Decommissioning Nuclear Power Plants in the United States.*”

Industrial Safety at Decommissioning Power Plants

In 2022, DUWP staff was considering issuing an Information Notice to address the September 2021 industrial safety fatality and the FY22 near-miss events at decommissioning reactors. However, staff has communicated industrial safety concerns to decommissioning licensees in other ways. On May 2, 2022, DUWP hosted a public meeting on decommissioning lessons learned with industry where the fatality and safety near misses were discussed. On November 30, 2023, Region 1 issued an OSHA Referral (NRC Form 760) due to increases in OSHA recordables and first aid issues at Indian Point during FY22 and FY23. DUWP does not foresee any additional actions based on the industry acknowledgement of the industrial safety issues as a licensee management concern.

Generic Issues Applicability

Quality of Information in the Licensee 10 CFR 50.75(g), “Reporting and record keeping for decommissioning planning.”

With the number of power reactor permanent shutdowns in active decommissioning, the staff has been reviewing licensee records and have identified inconsistencies in the licensee’s 10 CFR 50.75(g) files. This information is important to decommissioning. Staff has also identified that some licensees in active decommissioning are not including events that occur during decommissioning operations that are important to completing the decommissioning in the 10 CFR 50.75(g) files. Significant safety issues can arise with contamination at the sites with discrete radioactive particles (DRPs). Since DRPs have been a historical industry issue at operating plants and recent reactor decommissioning activities have resulted in DRP contamination, NMSS staff is working with Office of Nuclear Reactor Regulation (NRR) to issue an Information Notice to remind licensees to be aware of the need to survey for DRPs during operations and decommissioning and to document events in the 10 CFR 50.75(g) file in accordance with content and retention requirements. This issue did not meet the generic issue screening criteria.

3. Conclusions

Based on the analysis above, the review group concludes that:

1. Information Notice 2023-04 was issued address fire protection issues at decommissioning reactors. No further action is required.
2. NRC held a public meeting where lessons learned from recent decommissioning sites, including industrial safety issues, were discussed, and issued an OSHA referral for Indian Point due to the high incident rate of OSHA recordable and first aid events during FY22 and FY23 provided effective communication to decommissioning licensees regarding industrial safety. No further action is required.

3. Staff is working with NRR on an Information Notice to ensure licensees review operating and decommissioning activities that may result in discrete radioactive particles contamination and ensure licensees use the 10 CFR 50.75 (g) files, to document important information for decommissioning. Staff anticipates issuing the Information Notice in early CY24.
4. Staff will continue to monitor specific licensee performance, in particular Holtec Decommissioning International licensed sites with enforcement and industrial safety issues and Crystal River on Safety Culture issues.
5. Staff will continue evaluating the appropriateness of Decommissioning Trust Fund (DTF) uses to determine if actions are required. Staff will continue to coordinate and closely monitor the DTF uses across the Industry.

4. Recommendations

NMSS DUWP requests the OpE Review Group provide the following recommendations:

1. Support staff work with NRR on an Information Notice to ensure licensees review operating and decommissioning activities that may result in discrete radioactive particles contamination and ensure licensees use the 10 CFR 50.75 (g) files, to document important information for decommissioning. Staff anticipates issuing the Information Notice in early CY24.