

POLICY ISSUE
(INFORMATION)

September 28, 2015

SECY-15-0122

FOR: The Commissioners

FROM: William M. Dean, Director
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY FINDINGS RESULTING FROM THE STAFF REVIEW OF
THE 2015 DECOMMISSIONING FUNDING STATUS REPORTS FOR
OPERATING POWER REACTOR LICENSEES

PURPOSE:

This paper informs the Commission of the U.S. Nuclear Regulatory Commission (NRC) staff's findings from its review of the 2015 decommissioning funding status (DFS) reports for operating power reactor licensees. The regulations of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.75(f)(1) require that licensees submit DFS reports to the NRC. The 2015 DFS reports were due to the NRC by March 31, 2015, reflecting decommissioning funding assurance information as of December 31, 2014. This paper does not address any new commitments or resource implications.

BACKGROUND:

In 1988, the NRC established requirements to assure that decommissioning of all licensed facilities will be accomplished in a safe and timely manner and that adequate licensee funds will be available for this purpose. In accordance with NRC regulations in 10 CFR 50.2, "Definitions," decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits: (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license. For power reactor licensees, the costs of spent fuel management, site restoration, and other costs not related to license termination are currently not included within the scope of financial assurance for decommissioning.

CONTACT: Kosmas Lois, NRR/DIRS
301-415-8341

The Commission's regulations at 10 CFR 50.33(k)(1) and 10 CFR 50.75, "Reporting and Recordkeeping for Decommissioning Planning," require power reactor licensees to certify that they provide financial assurance for decommissioning. The amount to be provided must be equal to, or greater than, the amount stated in the table of minimum amounts (10 CFR 50.75(c)), also referred to as the NRC minimum, and adjusted annually to account for cost escalation.

In 1998, the NRC amended the decommissioning financial assurance rules to respond to the anticipated deregulation of the power generating industry, resulting in additional methods and flexibility for reactor licensees to provide financial assurance for decommissioning. Additionally, rule changes established the requirement that licensees submit a DFS report to the NRC on a biennial basis, which allow the agency to obtain the information necessary to monitor the status of decommissioning funds.

The Office of Nuclear Reactor Regulation's Office Instruction LIC-205, Revision 5, "Procedures for NRC's Independent Analysis of Decommissioning Funding Assurance for Operating Power Reactors," dated January 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14281A764), describes the methodology used by staff to determine whether a licensee has provided adequate decommissioning funding assurance.

DISCUSSION:

The regulations at 10 CFR 50.75(f)(1) state, "each power reactor licensee shall report, on a calendar-year basis, to the NRC by March 31, 1999, and at least once every 2 years thereafter on the status of its decommissioning funding for each reactor or part of a reactor that it owns." In 2015, all licensees submitted their DFS reports on or before March 31, 2015. The DFS reports included the following integral pieces of information: (1) the amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and 10 CFR 50.75(c); (2) the amount of decommissioning funds accumulated by the end of the calendar-year preceding the date of the report; (3) a schedule of the annual amounts remaining to be collected; (4) the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections; (5) any contracts upon which the licensee is relying; (6) any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report; and (7) any material changes to trust agreements. In accordance with the guidance in Office Instruction LIC-205, the NRC staff reviewed the information in the 2015 DFS reports for completeness and compliance with 10 CFR 50.75(f)(1). A table summarizing NRC staff's findings on the licensees' DFS reports is enclosed and is also available under ADAMS Accession No. ML15237A377.

The regulation at 10 CFR 50.75(c) requires licensees to demonstrate reasonable assurance of funding for decommissioning. Shortfalls should, therefore, be corrected in a timely manner. The staff notes that while the decommissioning funding amounts certified by licensees under this part do not represent the actual cost of plant decommissioning, they provide assurance that licensees have the bulk of the funds available to safely decommission the facility. Adjustments to the certification amount are required annually over the operating life of the facility and account for inflation that has occurred in the labor, energy, and waste burial component of decommissioning costs. Within five years prior to the projected end of operations, the regulation at 10 CFR 50.75(f) requires that each licensee submit a preliminary decommissioning cost estimate that includes an updated assessment of the major factors that could affect the

cost to decommission. The preliminary cost estimate is a more accurate representation of the licensee's cost to decommission as compared to the NRC required minimum. Therefore, shortfalls identified during the operating cycle and between biennial decommissioning reporting periods are considered to be temporary lapses in funding for decommissioning that may be remedied by utilization of a parent company guarantee, trust fund growth, or trust fund contributions. In any event, guidance in Regulatory Guide (RG) 1.159, "Assuring Availability of Funds for Decommissioning Nuclear Reactors," states, "shortfalls identified in a biennial report must be corrected by the time the next biennial report is due." Pursuant to 10 CFR 50.75(e)(2), the NRC may take action on a case-by-case basis to ensure a licensee's adequate accumulation of decommissioning funds.

Results of NRC Staff's Review

The results from staff's review of the 2015 DFS reports are as follows:

- All operating power reactor licensees¹ met the reporting requirements of 10 CFR 50.75(f)(1);
- As of December 31, 2014, 101 of the 104 operating power reactors have demonstrated decommissioning funding assurance.
- Exelon Generating Company (Exelon) self-reported shortfalls for Braidwood Station, Units 1 and 2, and Byron Station, Unit 2, which the NRC staff calculated to range from \$6 million to \$84 million. Exelon is currently evaluating alternative funding mechanisms allowed by 10 CFR 50.75(e) and regulatory guidance contained in RG 1.159.

Consistent with the discussion above, Exelon is expected to correct any decommissioning funding shortfalls in a timely manner and report compliance to the NRC on or before March 31, 2017. RG 1.159 provides possible mechanisms Exelon can use to make up the shortage of funds, including reliance on normal decommissioning trust fund growth, cash deposits into trust funds, and/or parent company guarantees.

Of note is that since the last reporting cycle in 2013, many licensees have improved the quality of the information provided in their DFS report submittals. Consequently, the NRC staff did not have to issue any requests for additional information in order to evaluate the 2015 DFS reports.

Resolution of Issues from Last Reporting Requirement Cycle

There were no unresolved issues from the staff's review of the 2013 DFS report submittals.

CONCLUSION:

Based on its review of the 2015 DFS reports, the staff finds that all the licensees are in compliance with the decommissioning funding assurance reporting requirements of

¹ For this reporting cycle, NRC received 104 DFS reports from its operating power reactor licensees, including the five plants that were transitioning, or have transitioned, to a decommissioning status. These plants are: Kewaunee, SONGS Units 2 and 3, Crystal River, and Vermont Yankee. At the time of the next biennial DFS review, these plants will not be included as part of the operating power reactor reviews.

10 CFR 50.75(f)(1). With the exception of Exelon as described above, the staff also finds that the remaining licensees are in compliance with the decommissioning funding assurance requirements of 10 CFR 50.75. No later than March 31, 2017, Exelon must demonstrate decommissioning funding assurance for Braidwood Station, Units 1 and 2, and Byron Station, Unit 2.

Consistent with the objectives of Project Aim 2020, the staff is evaluating the efficacy of providing the Commission with results of the biennial decommissioning funding assurance reviews as a part of the Office of Nuclear Reactor Regulation's re-baselining effort. Notwithstanding this re-baselining activity, following the next licensee reporting cycle in 2017, any unresolved trust fund shortfalls or significant decline in a trust fund balance that may have an adverse impact on decommissioning activities will be communicated to the Commission.

COORDINATION:

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

/RA/

William M. Dean, Director
Office of Nuclear Reactor Regulation

Enclosure:
2015 DFS Reports – Summary Table

10 CFR 50.75(f)(1). With the exception of Exelon as described above, the staff also finds that the remaining licensees are in compliance with the decommissioning funding assurance requirements of 10 CFR 50.75. No later than March 31, 2017, Exelon must demonstrate decommissioning funding assurance for Braidwood Station, Units 1 and 2, and Byron Station, Unit 2.

Consistent with the objectives of Project Aim 2020, the staff is evaluating the efficacy of providing the Commission with results of the biennial decommissioning funding assurance reviews as a part of the Office of Nuclear Reactor Regulation's re-baselining effort. Notwithstanding this re-baselining activity, following the next licensee reporting cycle in 2017, any unresolved trust fund shortfalls or significant decline in a trust fund balance that may have an adverse impact on decommissioning activities will be communicated to the Commission.

COORDINATION:

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

William M. Dean, Director
Office of Nuclear Reactor Regulation

Enclosure:
2015 DFS Reports – Summary Table

200800001

ADAMS Accession No.: ML15237A369; Pkg: ML15237A367; * - e-mail concurrence

OFFICE	NRR/DIRS/IFIB	NRR/DIRS/IFIB	NRR/DIRS	TechEd*	OGC/GCHEA*	NRR
NAME	KLois	ABowers	SMorris (AHowe For)	CHsu	EWilliamson (BMizuno For)	WDean
DATE	08/25/2015	09/08/2015	09/09/2015	09/15/2015	09/16/2015	09/28/2015

OFFICIAL RECORD COPY