

December 19, 2013

MEMORANDUM TO: Bruce A. Watson, Chief
Reactor Decommissioning Branch
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and
Environmental Management Programs

FROM: Andrea L. Kock */RA/*
Financial Analysis and International Projects Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE 2013 ANNUAL REVIEW OF
DECOMMISSIONING FUNDING STATUS REPORTS

The Financial Analysis and International Projects Branch (IFIB), Division of Inspection and Regional Support (DIRS), Office of Nuclear Reactor Regulation (NRR) has completed its review of the annual decommissioning funding status (DFS) reports for plants in decommissioning submitted in March 2013. A summary of our findings are enclosed. IFIB staff continued the development of a computer generated/automated approach while reviewing the 2013 DFS report submissions that incorporated the new reporting requirements under Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.82, to assure consistency of future reviews. IFIB will continue to upgrade the computer generated/ automated approach to capture future reporting requirements and to ensure efficiency and thoroughness in the review process. Should you have any questions, please contact Kosmas Lois at 301-415-8341.

Enclosure:
Summary of the Evaluation by NRR Related to
Decommissioning Funding Status Reports
for Reactors That Have Ceased Operation

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

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DATE	12/17/2012	12/19/2012

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SUMMARY OF THE EVALUATION BY THE OFFICE OF NUCLEAR REACTOR

REGULATION RELATED TO DECOMMISSIONING FUNDING

STATUS REPORTS SUBMITTED ANNUALLY FOR

REACTORS THAT HAVE CEASED OPERATION

1.0 REGULATORY BASIS

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.75(f)(2), "Each power reactor licensee shall report, on a calendar-year basis, to the U.S. Nuclear Regulatory Commission (NRC) by March 31, 1999, and at least once every two years thereafter on the status of its decommissioning funding for each reactor or part of a reactor that it owns. The information in this report must include, at a minimum: the amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c); the amount accumulated to the end of the calendar year preceding the date of the report; a schedule of the annual amounts remaining to be collected; 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; any contracts upon which the licensee is relying pursuant to paragraph (e)(1)(v) of this section; any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report; and any material changes to trust agreements. Any licensee for a plant that is within five years of the projected end of its operation, or where conditions have changed such that it will close within five years (before the end of its licensed life), or has already closed (before the end of its licensed life), or for plants involved in mergers or acquisitions shall submit this report annually." This memo documents NRR's evaluation of the annual decommissioning funding status reports for plants in decommissioning that were submitted in March 2013.

In 2013 there were new additional reporting requirements implemented for reactors that have ceased operation. Pursuant to 10 CFR 50.82 (a)(8)(v)-(vii), licensees must include the following information, current through the end of the previous calendar year: the amount spent on decommissioning, both cumulative and over the previous calendar year, the remaining balance of any decommissioning funds, and the amount provided by other financial assurance methods being relied upon, an estimate of the costs to complete decommissioning, reflecting any difference between actual and estimated costs for work performed during the year, and the decommissioning criteria upon which the estimate is based. The new regulations also specify that the licensee must annually submit to the NRC, by March 31, a report on the status of its funding for managing irradiated fuel. The report must include the following information, current through the end of the previous calendar year: the amount of funds accumulated to cover the cost of managing the irradiated fuel, the projected cost of managing irradiated fuel until title to the fuel and possession of the fuel is transferred to the Secretary of Energy; and if the funds accumulated do not cover the projected cost, a plan to obtain additional funds to cover the cost."

2.0 BACKGROUND

The Financial Analysis and International Projects Branch (IFIB) completed its review of the annual decommissioning funding status (DFS) reports submitted in March 2013. While conducting the 2013 DFS review, the staff developed additional requests for additional

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information (RAIs) to clarify and resolve any issues that were related to the new 10 CFR 50.82 reporting requirements. IFIB is currently awaiting responses from the licensees. In addition, the staff will continue to improve its automated approach of the review process to increase efficiency and ensure consistency of future reviews.

The staff notes that changes in disposal options may have a significant impact on findings for future reviews. The staff made the licensees aware in NUREG-1307, Rev.14, "Report on Waste Burial Charges," that if new disposal options become available, disposal rates may vary. Additionally, any Low Level Waste (LLW) contract that a licensee has in place today may not be a valid disposal contract at the end of the safe storage (SAFSTOR) period. This would be due to the duration of time before dismantlement of the plant, as well as the fact that if new disposal facilities become available, a licensee may be required to ship all LLW to a new designated site. The LLW disposal would then be based on rates established by the new site.

3.0 SUMMARY OF STAFF FINDINGS

NRC staff has concluded that the licenses demonstrated compliance with 10 CFR 50.75(f)(2), thus providing assurance that licensees are maintaining the minimum required decommissioning funds. However, additional information on the rate of expenditures is needed in order to comply with the new requirements in 10 CFR 50.82. The following constitutes the summary of the Staff findings on the annual DFS report analyses pursuant to 10 CFR 50.75(f)(2):

Dresden Unit 1

Exelon Corporation demonstrated compliance with 10 CFR 50.75(b)(1) for Dresden Unit 1 for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

Fermi Unit 1

Detroit Edison demonstrated compliance with 10 CFR 50.75(b)(1) for Fermi Unit 1 for the year ending December 31, 2012. To satisfy regulatory requirements, DTE Energy Company, the parent company of Detroit Edison, issued a parent company guarantee in the amount of \$20 million.

Humboldt Bay Unit 1

Pacific Gas and Electric Company (PG&E) demonstrated regulatory compliance with 10 CFR 50.75(b)(1) for Humboldt Bay Unit 1 for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

Indian Point Unit 1

Entergy Nuclear Operations demonstrated compliance with 10 CFR 50.75(b)(1) for Indian Point Unit 1 for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

LaCrosse Boiling Water Reactor

Dairyland Power Cooperative demonstrated compliance with 10 CFR 50.75(b)(1) for the LaCrosse Boiling Water Reactor for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

Millstone Unit 1

Dominion Nuclear Connecticut demonstrated compliance with 10 CFR 50.75(b)(1) for Millstone Unit 1 for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

Nuclear Ship Savannah

The U.S. Department of Transportation (DOT) demonstrated compliance with 10 CFR 50.75(b)(1) for the Nuclear Ship Savannah for the year ending December 31, 2012. As a federal licensee, the U.S. DOT issued a Statement of Intent, in accordance with 10 CFR 50.75(e)(1)(iv), to satisfy regulatory compliance.

Peach Bottom Unit 1

Exelon Corporation demonstrated compliance with 10 CFR 50.75(b)(1) for Peach Bottom Unit 1 for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

Rancho Seco

Sacramento Municipal Utility District demonstrated compliance with 10 CFR 50.75(b)(1) for Rancho Seco for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

San Onofre Unit 1

Together, Southern California Edison and San Diego Gas and Electric demonstrated compliance with 10 CFR 50.75(b)(1) for San Onofre Unit 1 for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

Three Mile Island Unit 2

First Energy Corporation demonstrated compliance with 10 CFR 50.75(b)(1) for Three Mile Island Unit 2 for the year ending December 31, 2012. RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

Vallecitos Boiling Water Reactor

General Electric Company (GE) demonstrated compliance with 10 CFR 50.75(b)(1) for Vallecitos Boiling Water Reactor (VBWR) for the year ending December 31, 2012. To satisfy regulatory requirements, General Electric Company issue a self-guarantee in the form of a

parent company guarantee in the amount of approximately \$576.9 million to cover decommissioning costs for multiple NRC licensed sites, including VBWR.

Zion Unit 1

ZionSolutions demonstrated compliance with 10 CFR 50.75(b)(1) for Zion Unit 1 for the year ending December 31, 2012.

Zion Unit 2

ZionSolutions demonstrated compliance with 10 CFR 50.75(b)(1) for Zion Unit 2 for the year ending December 31, 2012.

For both Zion Units 1 and 2 RAIs have been issued regarding the new 10 CFR 50.82 (a)(8)(v)-(vii) reporting requirements.

4.0 CONCLUSION:

While performing its review of the annual DFS reports for plants in decommissioning submitted in March 2013, IFIB staff found that the licensees demonstrated compliance with 10 CFR 50.75(b)(1) thus having proper funds allocated for decommissioning. All of the licensees' submittal reports showed that financial assurance for decommissioning funding has been provided in an amount which may be more, but not less, than the minimum amount in paragraph (c)(1) of this section of 10 CFR 50.75.

The Decommissioning Planning rule went into effect in December of 2012 and added more reporting requirements regarding decommissioning funding assurance. The information in 10 CFR 50.82 is relevant after a NRC plant has been shut down. The information in 10 CFR 50.82 is a more detailed financial assurance status report that includes such information as the amount spent on decommissioning, both cumulative and over the previous calendar year, the remaining balance of any decommissioning funds, and the amount provided by other financial assurance methods being relied upon. The report also details the status of funds for managing irradiated fuel.

Although the licensees demonstrated compliance with the minimum funding requirements in 10 CFR 50.75, not all licensees provided the new information required by 10 CFR 50.82. Thus the NRC has issued RAIs to some licensees. NRC will send a close out letter upon receiving adequate responses from the questions in the RAIs.