

July 11, 2012

The Honorable Barbara Boxer
Chairman, Committee on Environment
and Public Works
United States Senate
Washington, DC 20510

Dear Madam Chairman:

In accordance with our statutory duty to respond to recommendations by the U.S. Government Accountability Office (GAO) within 60 days of publication, we hereby submit our responses to the recommendations made by the GAO in their report entitled "Nuclear Regulation: NRC's Oversight of Nuclear Power Reactors' Decommissioning Funds Could Be Further Strengthened" (GAO-12-258), which we received on May 7, 2012.

The report, among other things, provides GAO's evaluation of the U.S. Nuclear Regulatory Commission's (NRC) analysis of the 2011 biennial decommissioning funding status reports submitted by nuclear power plant owners and GAO's evaluation of the NRC's process for taking action when reports show unacceptable levels of decommissioning funding assurance. GAO concluded that the NRC has strengthened its oversight of licensees' decommissioning funding. However, GAO provided five recommendations to address potential weaknesses that may limit the NRC's ability to ensure that licensees will have adequate funds at the time of decommissioning. The NRC agrees with three of the recommendations, disagrees with one recommendation, and agrees in part and disagrees in part with the remaining recommendation. NRC's comments on the recommendations are listed below:

- **Recommendation:** Better ensure that licensees are providing reasonable assurance that they will have the necessary funds and improve the consistency of information the agency collects by documenting procedures describing the steps the staff should take in their reviews analyzing licensee documentation and verifying that the licensees report to NRC in their Division of Facilities and Security reports match the amounts on their year-end bank statements.

Response: The NRC identified the need for revision of decommissioning funding assurance review guidance for the agency's financial analysis staff, delineated in Office Instruction LIC-205, "Procedures for NRC's Independent Analysis of Decommissioning Funding Assurance for Operating Nuclear Power Reactors," and initiated the revision in late 2010. NRC staff is finalizing updates to the Office Instruction that will more thoroughly document procedures used to verify decommissioning fund balances. The revision will be publicly available later this year in the NRC's Agencywide Documents Access and Management System (ADAMS).

- **Recommendation:** Better ensure that licensees are providing reasonable assurance that they will have the necessary funds and improve the consistency of information the agency collects by continuing the reviews of fund balances in a way that is most-efficient and effective for the agency.

Response: The NRC agrees with the GAO recommendation to continue the reviews of fund balances in a way that is most efficient and effective for the agency. The NRC is considering discontinuing licensee site reviews; however, the NRC plans to continue reviewing fund balances reported by licensees against the records maintained by the fund trustees, whether at the licensee's site or another location. The NRC will also consider incorporating the reviews into other routine visits to licensee offices. NRC anticipates that it will coordinate with licensees and the respective financial institutions, where the decommissioning trust fund records are kept, and will continue to review the fund balances in a manner that is most efficient for the NRC and the licensee.

- **Recommendation:** Consider reviewing a sample of the licensees' investments to determine if licensees are complying with decommissioning investment standards and determine whether action should be taken to enforce these standards.

Response: NRC regulations restrict investments in the nuclear sector, specify the standard of care for investments, and restrict the licensee's involvement in day-to-day management of investments. The NRC will consider whether additional information is needed to better understand the current methods used by licensees, investment managers, and trustees to assure compliance with the NRC's regulations. Based on that determination, the NRC will consider as appropriate alternative methods for reviewing licensee compliance with the regulations.

- **Recommendation:** Ensure reliability as part of the agency's process of reevaluating its decommissioning funding formula, by defining what the agency means by the "bulk" of the funds that licensees will likely need to decommission their reactors.

Response: The NRC disagrees that a definition of the meaning of "bulk" is necessary to ensure that licensees adequately plan for decommissioning costs. Rather than defining "bulk" when the NRC issued the decommissioning rules in 1988, the NRC explained the reasons for establishing a floor for funding assurance through the use of the minimum formula. The decommissioning funding formula is only one input to the NRC's regulatory system for funding assurance, which includes annual adjustments and accounting for site-specific costs. When these steps are considered as a whole, they provide reasonable assurance that funds will be available when needed. In addition, the NRC monitors licensee performance and takes action to ensure that the licensee's funding assurance meets the requirements. Based on experience, the regulatory system has been

adequate to ensure that power reactor licensees obtain funds when needed for decommissioning. However, as discussed in the response to the next GAO recommendation, the NRC is re-evaluating the formula which will include a comparison of the minimum formula to the range of expected decommissioning costs.

- **Recommendation:** Ensure reliability as part of the agency's process of reevaluating its decommissioning funding formula by using the cost-estimating characteristics as a guide for a high-quality cost-estimating formula in the event that NRC chooses to update the formula.

Response: The GAO stated that its cost estimating guide identified four characteristics of a high quality, cost estimating formula: being credible, being well documented, being comprehensive, and being accurate. The NRC agrees that its decommissioning funding formula provides a credible and well-documented basis, as recommended by the GAO guidelines, for establishing the minimum amount of funding needed to decommission a reactor.

The NRC will continue to ensure its formula meets these characteristics as part of its evaluation. The NRC formula is intended to provide a reference level decommissioning funding amount for use by licensees as a planning tool early in plant life. The formula amount is based on studies of the costs to decommission a reactor, but accuracy is difficult to achieve early in plant life due to the uncertainties of projecting costs decades into the future. In view of this, the NRC disagrees that the reevaluation of the formula should be the method to achieve the goals of credibility and accuracy. The NRC believes those goals should be achieved by requiring the licensee to provide an updated plant-specific cost estimate late in plant life, as found in Title 10 of the *Code of Federal Regulations* Section 50.75(f)(3). At that time, additional decommissioning information will be available to the licensee, which reduces uncertainties to a level that permits reasonable accuracy in cost projections.

To ensure that licensees accumulate adequate funds as costs rise, NRC regulations require all licensees to perform annual adjustments of the reference level funding to account for inflation. NRC monitors the licensees' progress by reviewing the decommissioning funding status reports that all power reactors must submit. The reference level approach, which combines a minimum initial requirement, annual inflation adjustments, monitoring, and a plant specific cost estimate late in plant life, accounts for uncertainties while ensuring adequate funding for decommissioning.

Since the establishment of the minimum decommissioning funding formula, several nuclear power plants have completed decommissioning, providing a practical experience-base that was not available at the time the minimum formula was put into the rules. Also, several nuclear power plant licensees have, over the last several years, submitted to the NRC site-specific cost estimates to decommission their reactors, providing a basis to benchmark the formula against. Lastly, the available options and cost structure for the treatment and disposal of low-level waste have changed significantly since

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the formula was developed. As a result, the NRC commissioned a study to re-evaluate the adequacy of the minimum formula. The NRC received the study in the first quarter of fiscal year 2012 and is evaluating the report.

The NRC will continue to evaluate its processes and policies associated with decommissioning funding assurance for power reactor facilities.

Sincerely,

/RA/

Allison M. Macfarlane

cc: Senator James M. Inhofe

Identical letter sent to:

The Honorable Barbara Boxer
Chairman, Committee on Environment
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cc: Senator James M. Inhofe

The Honorable Thomas R. Carper
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and Nuclear Safety
Committee on Environment and Public Works
United States Senate
Washington, DC 20510
cc: Senator John Barrasso

The Honorable Fred Upton
Chairman, Committee on Energy
and Commerce
United States House of Representatives
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cc: Representative Henry A. Waxman

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy and Power
Committee on Energy and Commerce
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cc: Representative Bobby L. Rush

The Honorable John Shimkus
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The Honorable Darrell Issa
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The Honorable Joseph I. Lieberman
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