



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

October 21, 2013

Paul A. Hardin, President  
Three Mile Island Nuclear Station  
Route 441 South  
Post Office Box 480  
Middletown, PA 17057-0480

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON THREE MILE ISLAND  
NUCLEAR STATION UNIT 2 – POST-SHUTDOWN DECOMMISSIONING  
ACTIVITIES REPORT, LICENSE: DPR-73, DOCKET: 50-320

Dear Mr. Hardin:

On June 28, 2013, GPU Nuclear, Inc. (GPU) submitted to the U.S. Nuclear Regulatory Commission (NRC) the Post-Shutdown Decommissioning Activities Report (PSDAR) for Three Mile Island Nuclear Station, Unit 2, (TMI-2) (ADAMS Accession No. ML13190A366) pursuant to 10 CFR 50.82(a)(4). The NRC has completed its review of the PSDAR in accordance with Regulatory Guide 1.185, Standard Format and Content for Post-Shutdown Decommissioning Activities Report, and concludes the following:

1. Section III of the PSDAR, Description of Decommissioning Activities, provides the applicable information identified in Section C(1) of Regulatory Guide 1.185. In addition, the staff finds that the PSDAR adequately describes the activities that will occur from the time the facility transitions from its current NRC approved Post-Defueling Monitored Storage (PDMS) state through final decommissioning of the facility.
2. Section IV of the PSDAR, Schedule of Decommissioning Activities, provides the estimated dates for initiation and completion of major decommissioning activities, as described in Section C(2) of Regulatory Guide 1.185. The PSDAR informs NRC that TMI-2 decommissioning activities will be conducted concurrently with Three Mile Island Nuclear Station, Unit 1. The schedule for TMI-2 decommissioning activities is adequate to achieve TMI-2 license termination within 60 years of permanent cessation of operations as required by 10 CFR 50.82(a)(3).
3. Section V of the PSDAR, Estimated Costs of Decommissioning Activities, provides an estimate of the expected decommissioning costs for TMI-2. However, the cost estimate does not appear to be based on the latest annual update to the decommissioning cost estimate as indicated in Section C(3) of Regulatory Guide 1.185. The PSDAR provides an estimated total decommissioning cost of \$844,885,000 (based on 2008 dollars). On March 29, 2013, GPU Nuclear submitted the Decommissioning Funding Status Report for the Three Mile Island Nuclear Station, Unit 2 (ADAMS No. ML13088A143). This report states that the decommissioning costs are estimated to be \$943,927,246, in 2012 dollars.

This cost estimate is based upon the site specific decommissioning cost study, Decommissioning Cost Analysis for Three Mile Island Unit 2, dated January 2009. The NRC staff is currently reviewing the March 29, 2013, Decommissioning Funding Status Report for the Three Mile Island Nuclear Station, Unit 2, for adequacy. Therefore, Section V of the PSDAR should be updated to reflect this most recent decommissioning cost estimate.

4. Section VI of the PSDAR, Environmental Impacts of Decommissioning Activities, provides a discussion of the potential environmental impacts associated with TMI-2 decommissioning activities as directed by Section C(4) of Regulatory Guide 1.185. The PSDAR includes a comparison of potential environmental impacts from planned decommissioning activities with impacts from similar activities provided in NUREG-0683, Supplement 3, "Programmatic Environmental Impact Statement Related to Decontamination and Disposal of Radioactive Wastes Resulting from March 28, 1979 Accident Three Mile Island Nuclear Station, Unit 2," (PEIS) and NUREG-0586, "Generic Environmental Impact Statement on Decommissioning of Nuclear Power Facilities," dated August 1988 and Supplement 1, dated November 2002 (GEIS).

The PEIS evaluated the environmental impacts associated with the activities necessary for decontamination, defueling, and waste disposition at the TMI-2 facility following the 1979 accident. The available alternatives evaluated in the PEIS ranged from no activity to full cleanup of the facility. The GEIS, and supplement, evaluated the environmental impacts of decommissioning activities at nuclear power reactors necessary to reduce residual radioactivity to levels that allow for termination of NRC licenses.

Since the decommissioning activities planned for the TMI-2 facility are similar to the activities conducted to bring the TMI-2 facility to its current PDMS state following the accident, and similar to routine nuclear power facility decommissioning activities, the staff agrees with GPU Nuclear's conclusion that the potential environmental impacts associated with TMI-2 decommissioning activities are bounded by the previously issued PEIS and GEIS and its supplement.

With the exception of the outdated decommissioning cost estimate discussed in Conclusion 3 above, the staff finds that the PSDAR is acceptable. Within 30 days of the date of this letter, GPU Nuclear should provide an updated decommissioning cost estimate which reflects the most recent annual update.

In accordance with 10 CFR 50.82(a)(7), GPU Nuclear must notify the NRC in writing before performing any significant decommissioning activity inconsistent with, or making a significant schedule change from, the planned decommissioning activities or schedules described in the PSDAR, including changes that significantly increase the decommissioning costs.

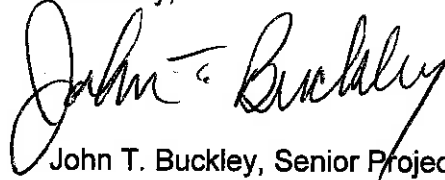
In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

P. Hardin

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If you have any questions regarding this letter, please contact John Buckley, at (301) 415-6607, or by e-mail at [John.Buckley@nrc.gov](mailto:John.Buckley@nrc.gov)

Sincerely,

A handwritten signature in black ink that reads "John T. Buckley". The signature is written in a cursive style with a large initial "J" and a long, sweeping underline.

John T. Buckley, Senior Project Manager  
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and Environmental Protection  
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Docket No.: 50-320  
License No.: DPR-73

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