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October 9, 2013

Kevin M. Witt
Project Manager
Japan Lessons-Learned Project Directorate
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission

Dear Mr. Witt:

This letter provides a quarterly programmatic update for the National Academy of Sciences' (NAS') study titled *Lessons Learned from the Fukushima Nuclear Accident for Improving Safety and Security of U.S. Nuclear Plants* under grant number NRC-HQ-12-G-03-0002 with the U.S. Nuclear Regulatory Commission (U.S.NRC). This report covers the seventh three-month project performance period: July 1, 2013 – September 30, 2013. Financial reporting has been provided separately.

The focus of committee activities during this reporting period continued to be on information gathering for and preparation of the study report. The committee held a half-day-long information-gathering session on August 14 to discuss the management of severe nuclear accidents. The following technical experts participated in this discussion:

- James Scarola, Chairman, Fukushima Response Steering Committee, Nuclear Energy Institute (Chief Nuclear Officer)
- Phillip Amway, Fukushima Fleet Technical Lead, Constellation Energy Nuclear Group (former Senior Reactor Operator)
- Derwood Tootle, SAM Project Manager, Hatch Nuclear Plant, Southern Nuclear (Senior Reactor Operator)
- Glen Morrow, Regulatory Assurance Manager, Dresden Nuclear Power Station, Exelon Generation (Senior Reactor Operator)

The committee also held eight closed meetings during this reporting period to work on its study report. These meetings were held on July 9, 23, 29, 30; August 14-15; and September 3, 9, 27. Draft 3 of the study report was completed as this reporting period ended.

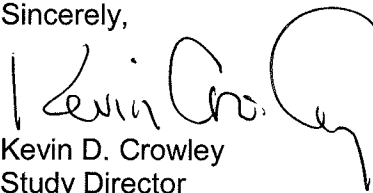
As was noted in the fifth quarterly report (dated April 11, 2013), the study has fallen behind schedule because of the cancellation of the committee's April meeting due to the Federal budget sequester. This cancellation has primarily affected the committee's work on the spent fuel safety and security portion of the study task (i.e., the second charge of the statement of task for this study; see Attachment 1). Work on the remaining charges of the study task (i.e., the first, third, and fourth charges) is less than a month behind schedule.

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The committee will have a further discussion of the study schedule during the next reporting period. In particular, the committee will discuss the possibility of splitting the study into two parts: The first, which would address study charges 1, 3, and 4 (see Attachment 1), would be targeted for completion on the original study schedule (i.e., completed in April 2014). The second, which would address study charge 2, would be completed on a longer schedule and published in a separate report. This option would require additional time and funding to hold currently unplanned for committee meetings to gather information and complete work on a second report.

Please contact me if you have any questions about the activities described in this quarterly programmatic update. I appreciate your excellent support of our project.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Crowley". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Kevin D. Crowley
Study Director

cc: Sheila Bumpass, NRC Contract Office
M'Lita Carr, NRC Contract Office

ATTACHMENT 1

Lessons Learned from the Fukushima Nuclear Accident for Improving Safety and Security of U.S. Nuclear Plants

Statement of Task

The National Research Council will provide an assessment of lessons learned from the Fukushima nuclear accident for improving the safety and security of nuclear plants in the United States. This assessment will address the following issues:

1. Causes of the Fukushima nuclear accident, particularly with respect to the performance of safety systems and operator response following the earthquake and tsunami.
2. Re-evaluation of the conclusions from previous NAS studies on safety and security of spent nuclear fuel and high-level radioactive waste storage, particularly with respect to the safety and security of current storage arrangements and alternative arrangements in which the amount of commercial spent fuel stored in pools is reduced.
3. Lessons that can be learned from the accident to improve commercial nuclear plant safety and security systems and operations.
4. Lessons that can be learned from the accident to improve commercial nuclear plant safety and security regulations, including processes for identifying and applying design basis events for accidents and terrorist attacks to existing nuclear plants.

The study may examine policy options related to these issues but should not make policy recommendations that involve non-technical value judgments.