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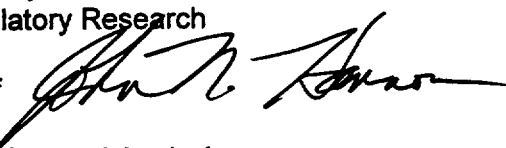
UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 3, 1999

12/8/99

Farouk said this letter counts as
a user need.

MEMORANDUM TO: Farouk Eltawila, Chief
Safety Margins and Systems Analysis Branch
Division of Systems Analysis and Regulatory Effectiveness
Office of Nuclear Regulatory Research

FROM: John N. Hannon, Chief 
Plant Systems Branch
Division of Systems Safety and Analysis
Office of Nuclear Reactor Regulation

SUBJECT: SUPPORT FOR SPENT FUEL POOL ACCIDENT RISK ASSESSMENT
FOR DECOMMISSIONING PLANTS

In April 1999, the Office of Nuclear Reactor Regulation (NRR) formed a technical working group (TWG) to perform a study of spent fuel pool accident risk at decommissioning plants. The TWG requested the support of the Office of Nuclear Regulatory Research (RES) in several areas to perform this study. In a memorandum dated November 12, 1999, the director of RES transmitted a report to the director of NRR in response to a March 26, 1999, user need letter. In the memorandum, it was stated that further recommendations for the thermal hydraulic and consequence analysis would be provided by January 2000.

On November 23, 1999, two members of the TWG and myself met with you and members of your staff to clarify the work that was being performed by RES mentioned in the November 12 memorandum and to establish a schedule to support the study being performed by NRR. The TWG is scheduled to release its draft report on the study for public comment in January 2000 and its final report in April 2000. This memorandum documents the agreed upon work and schedule from our meeting.

The primary intent of the November 12 memorandum was to transmit a consequence analysis report that was provided in summary form in May 1999. However, it was agreed in the meeting that areas of large uncertainty and conservatism in the analysis should be identified, so if at some time in the future, additional refinement of the analysis was needed, the information would be available. It was agreed that this information will be provided by December 10, 1999, for inclusion in the January 2000 report.

In a recent Advisory Committee on Reactor Safeguards (ACRS) meeting on the TWG study, your branch supported the TWG in responding to ACRS questions regarding the consequences of spent fuel pool accidents. In our meeting, it was agreed that your branch would be best

Contact: Diane Jackson, SPLB/DSSA/NRR
415-8548

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suited to address the ACRS concerns in the following areas: the role of ruthenium and the impact of a Canadian study and the effect, if any, resulting from the formation of zirconium hydride nodules and uranium trioxide. It was agreed that this information will be provided by January 14, 2000, to support the next ACRS meeting. These two deliverables, due on December 10, 1999, and January 14, 2000, are considered a continuation of the work in support of the March 26, 1999, user need letter, and will complete the work in response to that user need letter.

In the meeting, it was also clarified that the thermal hydraulic work mentioned in the November 12 memorandum is the work in response to the user need letter dated April 16, 1999. A schedule was established for preliminary conclusions to be provided to the appropriate NRR TWG member by December 10, 1999, for inclusion in the January report and the final written report to be transmitted by January 31, 2000. This schedule was mutually agreeable to both offices to support the schedule for the TWG study and allow your staff sufficient time to finalize the work into report format. These two deliverables will complete the work in response to the user need letter dated April 16, 1999.

It is our understanding that additional resources will not be required to complete this work. NRR appreciates RES's continued support.