

May 24, 2013

Dr. J. Sam Armijo, Chairman
Advisory Committee on Reactor Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: CHAPTERS 4, 15, 17, AND 19 OF THE SAFETY EVALUATION REPORT WITH OPEN ITEMS FOR CERTIFICATION OF THE UNITED STATES - ADVANCED PRESSURIZED WATER REACTOR DESIGN AND SAFETY EVALUATIONS OF SUPPORTING TOPICAL REPORTS

Dear Dr. Armijo:

Thank you for your letter dated April 29, 2013, regarding the safety evaluation report with open items associated with the United States – Advanced Pressurized Water Reactor (US-APWR) and the safety evaluations of the supporting topical reports. As discussed during the 603rd meeting of the Advisory Committee on Reactor Safeguards (ACRS) on April 11, 2013, the staff is currently working to resolve the open items associated with the review of Chapter 4, “Reactors”; Chapter 15, “Transient and Accident Analyses”; and Chapter 19, “Probabilistic Risk Assessment and Severe Accident Evaluation.” Chapter 17, “Quality Assurance and Reliability Assurance,” has no open items.

The staff is working with the applicant, Mitsubishi Heavy Industries, Ltd. (MHI), to resolve the open items, and to address the item in the “Conclusions and Recommendation” section of your letter that concerns the benchmarking of thermal-hydraulic models used for PRA success criteria and the initial stages of severe accident progression (the staff recently issued a related request for additional information). At a future ACRS meeting, the staff will address the resolution of these concerns.

The staff will also issue to MHI the final Topical Report Safety Evaluations for MUAP-07008-P(R2), “Mitsubishi Fuel Design Criteria and Methodology”; MUAP-07009-P(R0), “Mitsubishi Thermal Design Methodology”; MUAP-07010-P(R4), “Non-LOCA Methodology”; MUAP-07011-P(R3), “Large Break LOCA Code Applicability Report for US-APWR”; and MUAP-07013-P(R2), “Small Break LOCA Methodology for US-APWR.” Staff will request that MHI submit the approved versions of these topical reports to the U.S. Nuclear Regulatory Commission.

J. S. Armijo

- 2 -

The staff appreciates the willingness of ACRS to review the staff's safety evaluation report with open items on a chapter-by-chapter basis during this phase of the review process. The staff looks forward to the next ACRS meeting.

Sincerely,

/RA by Michael R. Johnson for/

R. W. Borchardt
Executive Director
for Operations

cc: Chairman Macfarlane
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
SECY

J. S. Armijo

- 2 -

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