

December 22, 2010

MEMORANDUM TO: Hossein G. Hamzehee, Chief
US-APWR Projects Branch
Division of New Reactors Licensing
Office of New Reactors

FROM: Stephen R. Monarque, Project Manager
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SUBJECT: SUMMARY OF THE NOVEMBER 3, 2010, PUBLIC MEETING WITH
THE UNITED STATES - ADVANCED PRESSURIZED WATER
REACTOR DESIGN CENTERED WORKING GROUP TO DISCUSS
INSPECTIONS, TEST, ANALYSES, AND ACCEPTANCE CRITERIA;
CONCEPTUAL DESIGN INFORMATION; AND RISK INFORMED
TECHNICAL SPECIFICATIONS

On November 3, 2010, the U.S. Nuclear Regulatory Commission (NRC) staff conducted a public meeting with the United States - Advanced Pressurized Water Reactor (US-APWR) Design Centered Working Group (DCWG). The US-APWR DCWG consists of Mitsubishi Heavy Industries, Ltd. (MHI), Luminant Generation Company, LLC. (Luminant), and Dominion Virginia Power (Dominion). The purpose of this meeting was to discuss the identification of Inspections, Test, Analyses and Acceptance Criteria (ITAAC) Improvement; Identification of Conceptual Design Information (CDI) in the US-APWR Design Control Document (DCD); and the application of Risk Informed Technical Specifications (RITS). A list of meeting attendees is provided as Enclosure 1.

The US-APWR DCWG discussed their effort to improve ITAAC. Enclosure 2 is titled "US-APWR DCWG Meeting ITAAC Improvement Effort," dated November 3, 2010 and is available in the Agencywide Documents Access and Management System (ADAMS) under accession number ML103070447. Enclosure 3 is titled, "2.6 Electrical Systems US-APWR Design Control Document," and is available in ADAMS under accession number ML103070448. MHI stated it wants to enhance the quality of the ITAAC to address clarity and inspectability, using the NRC Regulatory Issue Summary 2008-05, Revision 1 dated September 23, 2010, and other existing NRC staff guidance. First, MHI plans to provide the NRC staff with a schedule showing the planned ITAAC and the completed review for each corresponding DCD section. MHI will coordinate a working meeting with the NRC staff to review the completed ITAAC and DCD changes for each ITAAC related section. Afterwards, Luminant will determine the impact of these changes on the ITAAC for the Comanche Peak Nuclear Power Plant, Units 3 and 4, Combined License Application (COLA). Subsequently, Dominion will also determine the impact of any ITAAC changes to the DCD and Reference-COLA on the North Anna, Unit 3, Subsequent-COLA. The NRC staff then presented its handout regarding ITAAC Quality and Inspectability. This handout is provided as Enclosure 4 and is titled, "ITAAC Quality & Inspectability Lessons Learned," dated November 3, 2010, and is available in ADAMS under accession number ML103070446.

The NRC staff provided a lessons learned approach to the application of the ITAAC. The NRC staff stated that the ITAAC should be developed to promote a common and shared understanding, and the ITAAC should be clear and concise. The NRC staff also presented the correct format and content for the ITAAC, along with the proper language. The NRC staff plans to review the ITAAC in the DCD and COLAs near the issuance of the final safety evaluations.

The US-APWR DCWG then discussed the identification of conceptual design in the US-APWR DCD. The meeting handout is provided as Enclosure 5, titled "US-APWR DCWG Meeting Identification of CDI in the DCD," dated November 3, 2010, and is available in ADAMS under accession number ML103070449. The NRC staff had sent a Request for Additional Information (RAI) number 585 to MHI in May 2010, requesting that CDI be identified in the US-APWR DCD to distinguish certified standard plant design information from non-certified CDI. MHI submitted its response to RAI number 585 on September 24, 2010, to resolve the NRC's specific request for Chapter 9. MHI plans to examine the DCD for implementation of CDI as this would be beneficial to the NRC staff and the applicants. MHI then discussed its plans to use CDI in the US-APWR DCD, and provided examples. Finally, MHI stated that the current COLA design information was not expected to change due to the identification of CDI.

Finally, the US-APWR DCWG discussed RITS. Refer to the Meeting Handouts, which are provided in ADAMS under accession numbers ML103230360, "US-APWR Design Centered Working Group Risk Informed Technical Specifications Risk Informed Technical Specifications," dated November 3, 2010, and ML103230359, "US-APWR Design Centered Working Group Risk Informed Technical Specifications," dated November 3, 2010, both provided as Enclosure 6. Luminant discussed the meeting objectives, the history of the RITS application, and the number of challenges to the implementation of RITS. Luminant added that the risk metrics program has not been resolved for new plants, as Interim Staff Guidance - 08 requires a complete set of technical specifications with the Combined License (COL), and the NRC has never approved a RITS before approving the supporting Probabilistic Risk Assessment (PRA). The NRC staff then presented its plans for reviewing the Comanche Peak COL RITS. Refer to the Meeting Handout, available in ADAMS under accession number ML103230358, titled "US-APWR Design Centered Working Group Risk-Informed Technical Specifications," dated November 3, 2010, which is provided as Enclosure 7. The NRC staff identified several issues that present a challenge to implementing of RITS. These issues stem from the preservation of the enhanced safety for new reactors, lack of operational experience for new reactors, and differences in the timing of the review process between new and operating reactors. The NRC staff discussed its proposed options to the Commission for modifying the risk-informed regulatory guidance for new reactors. The first option involves no changes to the existing risk informed guidance. This option would entail no additional or revised guidance. The second option would involve revising existing guidance to implement significant safety enhancements. The last option would involve the development of lower numeric thresholds for new reactors. The last two options would require extensive work in developing or revising regulatory guides (RGs). The NRC staff is currently awaiting the Commission's decision on which option to use. However, the NRC staff indicated that Luminant could propose an acceptable alternative approach.

Finally, the NRC staff is considering several options for COL applicants who wish to use RITS. The first is for COL applicants to submit a license amendment after the issuance of a COL. Another option would be for the COL applicant to propose an alternative approach that is acceptable to the NRC staff. The last option will require the NRC staff to approve of any changes to

the Nuclear Energy Institute (NRI) 06-09 and NEI 04-10, RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," and RG 1.177, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications." Luminant requested a follow up meeting in December 2010. The NRC staff indicated it was willing to have such a meeting, though it may not be able to support the December 2010, time table.

CONCLUDING REMARKS

At the conclusion of the public meeting, the NRC staff asked if any members of the public had any questions or comments for the NRC staff. No members of the public responded.

Please direct any inquiries to me at 301-415-1544, or via e-mail at Stephen.Monarque@nrc.gov.

/RA/

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Docket Nos. 52-017, 52-021, 52-034 and 52-035

Enclosures:
As stated

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(Revised 06/23/2010)

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