

PMSTPCOL PEmails

From: Tai, Tom
Sent: Monday, April 04, 2011 4:18 PM
To: Tracey L. Mullinix
Cc: STPCOL; Abeywickrama, Bernadette; Roy Karimi; Wunder, George; Tonacci, Mark
Subject: STP - Ch 3.7.4 P4 SER for Integration
Attachments: Chapter 3.7.4 P4 SER.doc

Tracy,

Attached is Chapter 3.7.4 SER. This section is IBR and is almost the identical version as in Phase 2 with minor corrections (see tracked changes). This SER has not been updated much because of its IBR status but I'm not sure if it is consistent in format with other sections.

Please take a quick look at this if it can be integrated as-is. If not, do your magic.

Thanks

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Subject: STP - Ch 3.7.4 P4 SER for Integration
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From: Tai, Tom

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3.7.4 SEISMIC INSTRUMENTATION

3.7.4.1 Introduction

The applicant stated in the Final Safety Analysis Report (FSAR), Section 3.7, "Seismic Design," that this section incorporated by reference Section 3.7 of the certified U.S. Advanced Boiling-Water Reactor (ABWR) design control document (DCD). This indicates that the applicant will fully address the seismic instrument criteria in the DCD without any departures or supplemental information.

The following information included in DCD 3.7.4, "Seismic Instrumentation," was previously reviewed and certified by the U.S. Nuclear Regulatory Commission (NRC) staff during the design certification and was therefore not reviewed as part of the South Texas Project (STP) Combined License (COL) application:

- Location and description of instrumentation
- Seismic instrumentation operability and characteristics
- Control room operator notification
- Comparison of measured and predicted responses
- In-service surveillance

Section 3.7.4.2 of this safety evaluation report (SER) summarizes the contents on seismic instrumentation in FSAR Section 3.7.4. Section 3.7.4.3 provides a summary of the regulations and guidance used by the applicant to address the DCD's discussions on seismic instrumentation. Section 3.7.4.4 provides a review of the staff's evaluation of the section.

Section 3.7.4.5 discusses any post COL -activities. Finally, Section 3.7.4.6 provides an overall summary of the conclusions.

3.7.4.2 Summary of Application

Section 3.7 of the STP Units 3 & 4 COL FSAR, Revision 2, incorporates by reference Section 3.7 of the certified ABWR DCD, Revision 4.0 referenced in 10 CFR 52, Appendix A. Section 3.7.4 incorporates by reference in its entirety.

In addition, in FSAR 3.7, the applicant provided the following:

COL License Information Items

- COL License Information Item 3.7.5.2 Pre-Earthquake Planning and Post-Earthquake Actions

3.7.4.3 Regulatory Basis

The regulatory basis of the information incorporated by reference is addressed within the FSER related to the ABWR DCD, NUREG -1503.

The certified ABWR Standard Design has been demonstrated to conform to the requirement of Appendix A, "Design Certification Rules for ABWR" to Title 10 *Code of Federal Regulations* (CFR) Part 52. Incorporating by reference ensures that the applicant will conform to the requirements of General Design Criterion 2, "Design Bases for Protection against Natural Phenomena," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities,"; and Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to 10 CFR Part 50.

3.7.4.4 Technical Evaluation

The NRC staff's review of Section 3.7 of the FSAR finds that it is appropriate for the applicant to incorporate by reference Section 3.7.4 of the ABWR DCD because Section 3.7.4 of the DCD was previously reviewed and approved by the NRC staff. Accordingly, since the departures noted in Chapter 3.7 do not apply to Subsection 3.7.4, the staff concludes that the information is sufficient to satisfy the requirements of Appendix S to 10 CFR Part 50.

Section 3.7.5.2, "Pre-Earthquake Planning and Post-Earthquake Actions" provides supplemental information to address COL information Item 3.20. No Request for Additional Information (RAI) was issued resulting from the preparation of the SER of Section 3.7.4.

3.7.4.5 Post Combined License Activities

The following item was identified as the responsibility of the COL license holder:

STP COL Application (Revision 2) Subsection 3.7.5.2 reads:

"The following standard supplement addresses COL License information Item 3.20. The procedures for pre-earthquake planning and post-earthquake actions will be developed in accordance with Subsection 3.7.4 and Section 13.5 prior to fuel load. The procedures will implement the seismic instrumentation program specified in Subsection 3.7.4 and follow the guidelines recommended in EPRI Report NP-6695 (Reference 3.7-7), with the exceptions listed in Subsection 3.7.5.2 of the reference DCD. (COM 3.7-1)"

3.7.4.6 Conclusion

The NRC staff concludes that the incorporation by reference of ABWR DCD Section 3.7.4 into FSAR Section 3.7.4 is acceptable because the ABWR DCD has been reviewed and approved by NRC staff. Therefore, the staff concludes the applicant has provided sufficient information to satisfy the requirements of Appendix S to 10 CFR Part 50.