

May 21, 2010

MEMORANDUM TO: Edwin M. Hackett, Executive Director  
Advisory Committee on Reactor Safeguards

FROM: David B. Matthews, Director /**RA – F. Akstulewicz for**/  
Division of New Reactor Licensing  
Office of New Reactors

SUBJECT: SAFETY EVALUATION REPORT WITH OPEN ITEMS  
REGARDING THE SOUTH TEXAS PROJECT UNITS 3 AND 4  
COMBINED LICENSE APPLICATION – CHAPTERS 6, 10, AND 13

The U.S. Nuclear Regulatory Commission (NRC) staff is preparing safety evaluation reports (SERs) with open items (OIs) for the Final Safety Analysis Report (FSAR) of the South Texas Project (STP) Units 3 and 4 combined license (COL) application. The application was submitted by South Texas Project Nuclear Operating Company on September 20, 2007. STP Units 3 and 4 reference the Advanced Boiling-Water Reactor (ABWR) certified design.

The staff has completed the detailed review of FSAR Chapters 6, 10, and 13 and prepared the corresponding safety evaluations with OIs for the subject chapter. The safety evaluation with OIs is being provided to support the upcoming meeting of the Advisory Committee on Reactor Safeguards (ACRS) ABWR Subcommittee, scheduled to be held on June 24, 2010. The ACRS Full Committee meeting will be held at a future date. The safety evaluation with OIs is based on Revision 3 (September 2009) of the COL application which incorporates by reference Revision 4 of the ABWR Design Certification Amendment (DCD).

For Chapter 6 (ML101310515), the staff plans to focus their presentation on the following specific categories of interest:

- Containment methodology and the staff's confirmatory analysis.
- Emergency Core Cooling (ECCS) suction strainers

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E. Hackett

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For Chapter 10 (ML100640567), the staff plans to focus their presentation on the STP Units 3 and 4 turbine generator system, which is based on a Toshiba design.

For Chapter 13 (ML100990134), the staff plans to discuss applicant's intent to extend the elements of existing emergency plans for Units 3 and 4 and TSC habitability.

Docket Nos.: 52-012, 52-013

Enclosures: As stated

cc: Mark McBurnett, Vice President  
Regulatory Affairs  
South Texas Project Nuclear Operating Company  
P. O. Box 289  
Wadsworth, TX 77493

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