

South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

April 14, 2010 U7-C-STP-NRC-100025

U. S. Nuclear Regulatory Commission Attention: Document Control Desk One White Flint North 11555 Rockville Pike Rockville MD 20852-2738

South Texas Project Units 3 and 4 Docket Nos. 52-012 and 52-013 Revised Response to Request for Additional Information

Reference: Letter, Mark McBurnett to Document Control Desk, "Response to Request for Additional Information," dated February 3, 2010, U7-C-STP-NRC-100033, (ML100360834).

This letter revises the original response to Request for Additional Information (RAI) 17.4-9 provided in the referenced letter. Attachment 1 addresses the following RAI:

17.4-9 Revised Response

COLA revisions are not identified in the revised response.

A new NRC commitment, COM 17.4-1, is provided in Attachment 2 to ensure the FSAR update discussed in the revised response is implemented.

If you have any questions regarding this revised RAI response, please contact me at (361) 972-7136, or Bill Mookhoek at (361) 972-7274.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on <u>4/14/10</u>

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Scott Head Manager Regulatory Affairs South Texas Project Units 3 & 4

jaa

Attachment:

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- 1. RAI 17.4-9, Revised Response
- 2. Summary of Commitment COM 17.4-1

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cc: w/o attachment except* (paper copy) Director, Office of New Reactors U. S. Nuclear Regulatory Commission One White Flint North 11555 Rockville Pike Rockville, MD 20852-2738

Regional Administrator, Region IV U. S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 400 Arlington, Texas 76011-8064

Kathy C. Perkins, RN, MBA Assistant Commissioner Division for Regulatory Services Texas Department of State Health Services P. O. Box 149347 Austin, Texas 78714-9347

Alice Hamilton Rogers, P.E. Inspection Unit Manager Texas Department of State Health Services P. O. Box 149347 Austin, Texas 78714-9347

C. M. Canady City of Austin Electric Utility Department 721 Barton Springs Road Austin, TX 78704

*Steven P. Frantz, Esquire A. H. Gutterman, Esquire Morgan, Lewis & Bockius LLP 1111 Pennsylvania Ave. NW Washington D.C. 20004

*Michael Eudy *Raj Anand Two White Flint North 11545 Rockville Pike Rockville, MD 20852 (electronic copy) *George F. Wunder *Michael Eudy *Raj Anand U. S. Nuclear Regulatory Commission

Steve Winn Joseph Kiwak Eli Smith Nuclear Innovation North America

Jon C. Wood, Esquire Cox Smith Matthews

J. J. Nesrsta Kevin Pollo L. D. Blaylock CPS Energy

RAI 17.4-9, Revision 1

QUESTION:

The staff requested in RAI 17.4-1 that STP include in Section 19K of the STP FSAR the specific SSCs that are in scope of the RAP associated with the risk-significant common cause failures (CCFs) of the HPCF, RHR, RBCW, and RSW systems. In response to RAI 17.4-1, STP proposed to include in FSAR Section 19K those SSCs of the HPCF, RHR, RBCW, and RSW systems whose CCFs are significant contributors to system unavailability or core damage frequency (CDF), which are identified in the ABWR Standard Safety Analysis Report (SSAR), Section 19D.8.6. As explained below, the staff found that the SSCs of the HPCF, RHR, RBCW, and RSW systems that STP proposed to add to the scope of RAP as a result of CCFs may not be complete.

Based on Section 19D.8.6 of the ABWR SSAR, the following SSCs are considered in the CCF sensitivity analysis for the HPCF, RHR, RBCW, and RSW systems: pumps, pump auxiliary equipment, manual valves, motor-operated valves, check valves, room air conditioners, spargers, strainers, circuit breakers, flow transmitters, heat exchangers, and temperature elements. Section 19D.8.6 of the ABWR SSAR also identified the most significant CCF contributors to system unavailability or CDF for these systems (e.g., pumps, strainers, room air conditioners). It should be noted, however, that those SSCs whose CCFs are not significant contributors to system unavailability or CDF can still be risk important (i.e., the CCFs of these SSCs can have a high risk achievement worth (RAW) or Fussell Vesely (FV)), and, therefore, should be evaluated for inclusion in the scope of RAP. For example, based on the discussion in Section 19D.8.6 of the ABWR SSAR, CCF of the HPCF pumps is a significant contributor to system unavailability or CDF and has a high risk importance according to Table 19K-1 of the STP FSAR. While CCF of the HPCF check valves may not be a significant contributor to system unavailability or CDF, its CCF risk importance (e.g., RAW) would be very similar to that of the HPCF pumps, and, therefore, should be include in the scope of RAP.

Since Section 19D.8.6 of the ABWR SSAR addresses CCF of numerous SSCs for the HPCF, RHR, RBCW, and RSW systems (e.g., the CCFs of pumps, pump auxiliary equipment, manual valves, motor-operated valves, check valves, room air conditioners, spargers, strainers, circuit breakers, flow transmitters, heat exchangers, and temperature elements), the staff requests that the applicant re-evaluate these SSCs for inclusion in RAP considering their CCF risk importance (e.g., RAW and FV).

REVISED RESPONSE:

This response revises the response originally provided for the staffs Request for Additional Information (RAI) number 17.4-9 in letter U7-C-STP-NRC-100033, dated February 3, 2010, (ML100360834) as indicated below.

The SSCs identified in the question above (e.g., pump auxiliary equipment, manual valves, motor-operated valves, check valves, room air conditioners, spargers, strainers, circuit breakers,

RAI 17.49, Revised Response

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flow transmitters, heat exchangers, and temperature elements) will be evaluated by the Design Reliability Assurance Program (D-RAP) Expert Panel using the process described in FSAR Section 17.4S.1.4 as detailed design progresses.

The current schedule is to complete a majority of the system reviews under the D-RAP program by the end of 2010 and to complete all of the system reviews, provide a list of the set of D-RAP Structures, Systems, and Components (SSCs), and have the program elements in place to control future activities by the third quarter of 2011. The FSAR will be updated in accordance with 10CFR50.71(e) to provide the Expert Panel Failure Modes and RAP activities recommendations for this set of risk-significant equipment.

No changes to the COLA are required as a result of this response.

Summary of Commitment COM 17.4-1

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COM 17.4-1

| Commitment | Description | Completion Date |
|------------|---|-----------------|
| COM 17.4-1 | Complete all of the Expert Panel system reviews, | September 30, |
| CR 10-8072 | provide a list of the set of Design Reliability Assurance | 2011 |
| Action 1 | Program (D-RAP) Structures, Systems, and | |
| | Components (SSCs), and have the program elements in | |
| | place to control future activities. | |
| | The FSAR will be updated in accordance with | |
| | 10CFR50.71(e) to provide the Expert Panel Failure | |
| | Modes and RAP activities recommendations for this set | |
| | of risk-significant equipment. | |