

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

July 29, 2010 U7-C-STP-NRC-100182

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 Response to Request for Additional Information

Attached are the responses to NRC staff questions included in Request for Additional Information (RAI) letter number 348 related to Combined License Application (COLA) Part 2, Tier 2, Chapter 3 and Chapter 6. This completes the response to this letter.

The Attachment addresses the responses to the RAI questions listed below:

RAI 03.09.03-6 RAI 03.09.03-7

There are no commitments in this response.

If you have any questions regarding these responses, please contact Scott Head 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>7/29/10</u>

MAMBunt

Mark McBurnett Vice-President, Oversight and Regulatory Affairs South Texas Project Units 3 & 4

LIR

STI 32715748

jet

Attachments:

- 1. RAI 03.09.03-6
- 2. RAI 03.09.03-7

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

*Tom Tai *Stacy Joseph Two White Flint North 11545 Rockville Pike Rockville, MD 20852 (electronic copy)

*George F. Wunder *Tom Tai *Stacy Joseph Loren R. Plisco U. S. Nuclear Regulatory Commission

Steve Winn Joseph Kiwak Eli Smith Nuclear Innovation North America

Peter G. Nemeth Crain, Caton & James, P.C.

Richard Peña Kevin Pollo L. D. Blaylock CPS Energy

RAI 03.09.03-6

QUESTION:

This RAI 4793 supplements RAI 3093.

In RAI 3093 response, the applicant provided the schedule for the completion for design specifications for risk significant ASME Class 1, 2 and 3 components. As shown in the RAI 3093 response, all design specifications for the risk significant components are to be completed on or before the second quarter of 2010 (Q2-10). To support performance of this staff regulatory audit of the design specifications of the risk significant ASME Class 1, 2 and 3 components, the staff requests the applicant to provide the following:

1. The dates during which the applicant could support an audit of the design specifications.

2. A list of available design specifications for staff review.

RESPONSE:

Table 03.09.03-3, identified in the response to RAI 3093 (RAI 03.09.03-3), listed a set of design specifications for risk significant ASME Class 1, 2 and 3 components to be available for staff review. This set of design specifications will be available for staff review by the middle of August 2010, with exception to the Wetwell/Drywell Vacuum Breakers design specification, which will be available in December 2010.

No COLA revision is required as a result of this RAI response.

System	Component
RCIC System	· · · · · · · · · · · · · · · · · · ·
	Turbine
·	Pump
	Min Flow Bypass Valve E51-F011
	Injection Valve E51-F004
	Steam Supply Valve E51-F037
	Check Valve F038
	Check Valves {F003, F005}
	Isolation Valves {F035, F036, F039}
COPS	
	AOVs {F007, F010}

Table 03.09.03-3

· .,

System	Component
	Rupture Disks
, , , , , , , , <u>, , , , , , , , , , , </u>	Flow Lines
HPCF	
	Pumps
	Maintenance Valve F005 {B, C}
· · · · · · · · · · · · · · · · · · ·	Injection Valves F003 {B,C}
NB System	
	Isolation Check Valves F003B and F004B
· · · · ·	SRV discharge piping
	ADS F010 {A,C,F,H,L,N,R,T}
	non-ADS F010 {B,D,E,G,J,K,M,P,S,U}
RSW System	terren and and the second s
2	Pumps
	Supply Isolation Valves F004 {A,B,C,D,E,F},
	F014 {A,B,C}, F013 {A,B,C,D,E,F}
DONIO	Strainers
RCW System	
	Pumps
	Isolation Valves F015 {A,B,C,D,E,F} F002 {A,B,C,D,E,F}
	Heat Exchangers
RHR ,	······································
	ACIWA Manual Valves {F101, F102}
<u> </u>	Heat Exchangers
	Pumps
	Injection Valves {F001, F003, F005, F006} {A,B,C}
	Isolation Valves {F010, F011}
	Admission Valves, F012
SLC	
	Tank
	Valves {F006}
	Piping
	Pumps

U7-C-STP-NRC-100182 Attachment 1 Page 3 of 3

1

System	Component
CUW	
	Isolation Valves {F002, F003}
	Remote Manual Shutoff Valve {F028}

۶.

Emergency Diesel Generator System		
	Starting receiver tanks and valves,	
	Safety-related diesel cooling water system, and lube oil system	
	Fuel oil storage tanks and day tanks	
Other		
	Wetwell/Drywell Vacuum Breakers	
	Reactor Pressure Vessel	
	Reactor Internals	
	Control Rod Drives	

.

ð

RAI 03.09.03-7

QUESTION:

This RAI 4794 supplements RAI 4555.

In RAI 4555 response, the applicant stated:

- 1. The load combinations evaluated for the RJ-ABWR of ECCS strainer do not match the load combinations required to be evaluated in Table 3.9-2 of the DCD.
- 2. The RJ-ABWR of ECCS strainers was designed and evaluated in accordance with JSME code, but not ASME Section III code requirements.
- 3. The pressure load on the strainer as a result of safety relief valve (SRV) discharge for RJABWR of ECCS strainers was based on the jointly developed ABWR test program. The STP 3& 4 SRV loadings will be calculated in accordance with the same methodology. These loads will be finalized in 2010.

The staff requests the applicant to provide or to confirm the following:

- 1. The load combinations of the ECCS strainer will be evaluated as shown in Table 3.9-2 of the DCD.
- 2. The ECCS strainer design, stress analysis is performed in accordance with ASME Section III code requirements.
- 3. Provide ASME design specification and design report of the ECCS strainer for staff review. The strainer design specification and design report are prepared in accordance with the ASME Code, Section III, NCA-3250.

RESPONSE:

- 1. The load combinations for the STP 3&4 ECCS suction strainers will be evaluated as shown in Table 3.9-2 of the DCD.
- 2. The ECCS strainer design and the stress analysis will be performed in accordance with ASME Section III code requirements.
- 3. A draft version of the design specification for the Emergency Core Cooling System (ECCS) strainers is currently available for NRC review. The specification does not yet include the specific loads and load combinations to be applied to the design of the STP 3&4 ECCS suction strainers. The final completed specifications for all ECCS strainers, which includes the specific loads and load combinations, will be available for NRC

review by January 15, 2011. The design reports for the High Pressure Core Flooder (HPCF) and Residual Heat Removal (RHR) suction strainers will be available for NRC review by January 15, 2011 and the design report for the Reactor Core Isolation Cooling (RCIC) suction strainer will be available by March 15, 2011. Both the strainer design specification and the design reports will be prepared in accordance with the ASME Code, Section III, NCA-3250 requirements.

No COLA change is required as a result of this response.