



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

April 15, 2010  
U7-C-STP-NRC-100084

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 327 related to Combined License Application (COLA) Part 2, Tier 2, Section 3.2.2. This completes the response to the letter. Attachments 1 and 2 provide the responses to the RAI questions listed below:

RAI 03.02.02-10  
RAI 03.02.02-11

Where there are COLA markups, they will be made at the first routine COLA update following NRC acceptance of the RAI response.

This letter includes a new commitment summarized in Attachment 3.

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

*DO91*  
*MRJ*

STI 32655172

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

Executed on 4/15/10



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

jep

Attachments:

1. RAI 03.02.02-10
2. RAI 03.02.02-11
3. Commitment (COM) 3.2-1

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  
P. O. Box 149347  
Austin, Texas 78714-9347

Alice Hamilton Rogers, P.E.  
Inspections Unit Manager  
Texas Department of 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  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852

(electronic copy)

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

Steve Winn  
Joseph Kiwak  
Eli Smith  
Nuclear Innovation North America

Jon C. Wood, Esquire  
Cox Smith Matthews

Richard Peña  
Kevin Pollo  
L. D. Blaylock  
CPS Energy

**RAI 03.02.02-10****QUESTION:**

The revised RAI 03.02.02-6 response identified that classifications are verified through the design/QA process and therefore an ITAAC is not needed. Staff concurs that, consistent with the COL license information in ABWR DCD Subsection 1.1.11.1, the cited design/QA verification process is an acceptable alternative way to close the 03.02.02-6 open item without a separate ITAAC to verify quality group classification, provided there is some type of licensing commitment by the applicant to ensure the design verification process and as-built reconciliation are completed prior to fuel load. As identified in recently issued NRC interim staff guidance ESP/DC/COL-ISG-015 (ML093561416), this commitment may be represented by a FSAR commitment or license condition combined with an implementation schedule in order to support confirmation by the NRC via inspection. The staff believes that a license condition is not needed, but a licensing commitment is appropriate. For example, SRP 14.3 Appendix C states that the generic Piping Design ITAAC includes a verification of the design report to ensure that the appropriate design code requirements for the system's safety class have been implemented. Therefore, a specific FSAR commitment could be made to include verification of the classifications in the review of design reports in combination with the design/QA process cited in the revised response.

**RESPONSE:**

Consistent with the staff recommendation, the following commitment will be added to include verification of the classifications in the review of design reports in combination with the design/QA process.

Insert the following paragraph as a new Subsection 3.2.3S of COLA Part 2, Tier 2.

**3.2.3S Safety Classifications of Site-Specific Systems**

Verification of the design of site-specific systems will assure that the appropriate design code requirements for the system's safety class have been implemented in the design. These verification activities normally will be completed before the design outputs are used for activities such as procurement, manufacture or construction. When such timing cannot be achieved, the design verification will be completed prior to fuel load.  
(COM 3.2-1)

**RAI 03.02.02-11****QUESTION:**

Rather than including a licensing commitment to update the FSAR figures to include the QG, the response to RAI 03.02.02-2 references the Tables for QG classifications. Although NRC staff can audit detailed P&IDs during the detailed design stage, QG boundaries should also be shown on the simplified P&IDs in the COL FSAR. SRP 3.2.2 states that the P&IDs are reviewed to ensure that the applicant has delineated in detail the system quality group classification boundaries for systems important to safety and SRP 14.3 Appendix C states that the functional drawings identify the boundaries of the ASME Code classification that are applicable to the safety class. Considering the revised response to RAI 03.02.02-6 relative to ITAAC, a licensing commitment should also be cited by the applicant to update FSAR figures for P&IDs prior to fuel load, including an appropriate implementation schedule. If the applicant plans to include the quality group/ASME Code boundaries during the annual updates the staff will defer this review of P&IDs until later.

**RESPONSE:**

In response to RAI 03.02.02-2 provided in letter U7-C-STP-NRC-090111, dated August 26, 2009, information was provided concerning the use of Tier 2 Chapter 21 P&IDs and related tables to determine Quality Group (QG) and ASME Code classifications.

SRP 14.3 Appendix C “provides guidance and rationale of what should be included in the Tier 1 Design Descriptions (DDs), figures, and ITAAC for fluid systems.” The Functional drawings that identify the code break boundaries of the ASME Code classifications are therefore provided in the simplified piping diagrams as shown in the ABWR DCD Tier 1 Figures. The ASME Code classifications are provided by use of specific piping line symbols and designations. The identification convention is detailed in Tier 1, Appendix A, Legend for Figures.

Site specific details were not included in the ABWR DCD Tier 1 Figures.

The site specific representation of the Ultimate Heat Sink (UHS) and Reactor Service Water System is included in COLA Part 9, Section 3.0, Site-Specific ITAAC as Figure 3.0-1. Although the figure used the Tier 1 line symbol representative of ASME Code Class 3 for the piping, there was no Appendix A “designation” that correlated to that classification because there are no code breaks on this figure.

To provide additional clarity, COLA Part 9, Section 3.0, Figure 3.0-1 will be revised to add the ASME Code Class 3 designation to piping on this diagram as indicated in a gray balloon on the attached figure. There are no QG breaks on this figure.

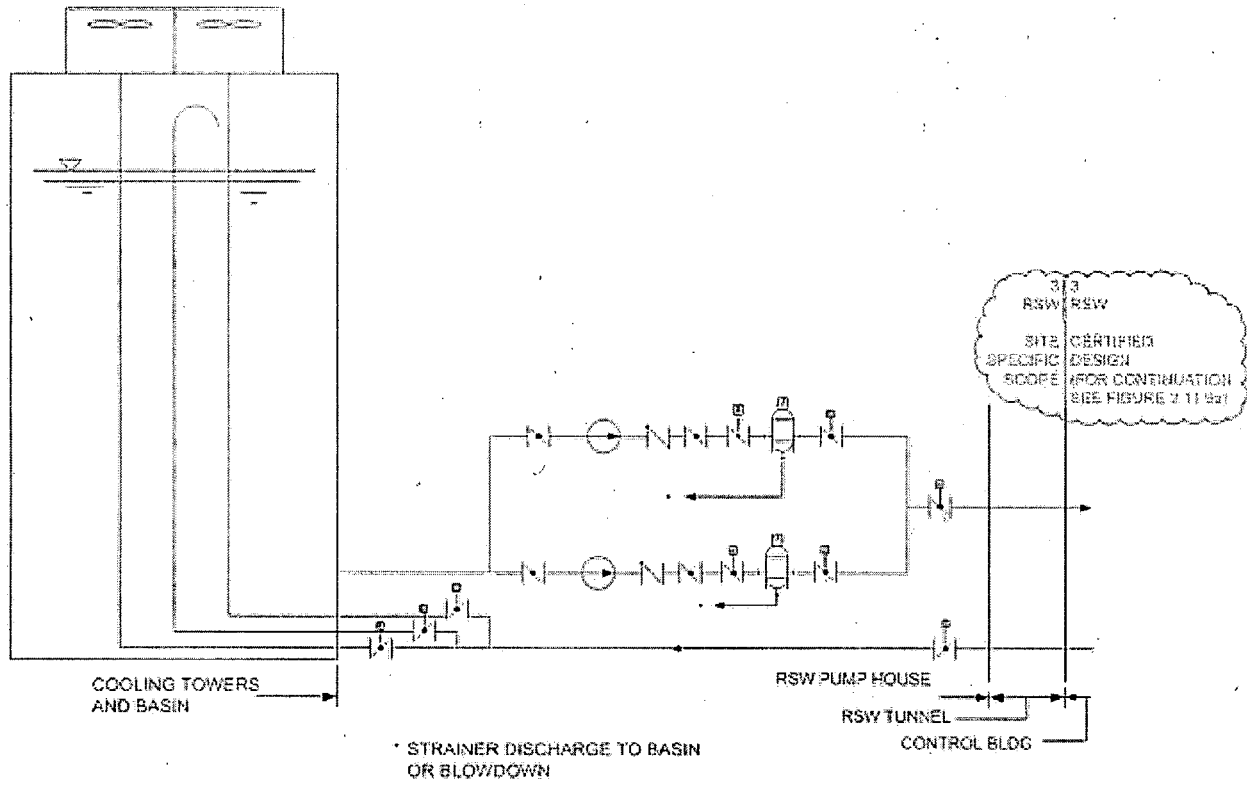


Figure 3.0-1 UHS and Reactor Service Water System

**COMMITMENT (COM) 3.2-1**

Commitment	Description	Completion Date
COM 3.2-1	Verification of the design of site-specific systems will assure that the appropriate design code requirements for the system's safety class have been implemented in the design. These verification activities normally will be completed before the design outputs are used for activities such as procurement, manufacture or construction. When such timing cannot be achieved, the design verification will be completed prior to fuel load.	Prior to fuel load