



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

June 22, 2009

U7-C-STP-NRC-090060

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 responses to NRC staff questions included in Request for Additional Information (RAI) letter numbers 107 and 108 related to Combined License Application (COLA) Part 2, Tier 2, Sections 4.2 and 4.6. This submittal completes the response to these RAI letters.

Attachments 1 through 4 are responses to the RAI questions listed below:

RAI 04.02-1
RAI 04.02-2
RAI 04.06-2
RAI 04.06-3

When a change to the COLA is indicated, the change will be incorporated into the next routine revision of the COLA following NRC acceptance of the RAI response.

There are no commitments in this letter.

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

DO91
NRC

STI 32492871

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

Executed on 6/22/09



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

jep

Attachments:

1. Question 04.02-1
2. Question 04.02-2
3. Question 04.06-2
4. Question 04.06-3

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
Texas Department of Health Services
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

*George F. Wunder
*Tekia Govan
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852

(electronic copy)

*George Wunder
*Tekia Govan
Loren R. Plisco
U. S. Nuclear Regulatory Commission

Steve Winn
Eddy Daniels
Joseph Kiwak
Nuclear Innovation North America

Jon C. Wood, Esquire
Cox Smith Matthews

J. J. Nesrsta
R. K. Temple
Kevin Pollo
L. D. Blaylock
CPS Energy

RAI 04.02-1:

QUESTION:

The first full paragraph under Section 4B.2 references “Section 4.2.II.D.3 of the Standard Review Plan (SRP)”. This should be Section 4.2.II.4.C. Please explain the discrepancy and correct as necessary.

RESPONSE:

Standard Review Plan (SRP) Section 4.2.II.D.3 refers to the section of the Fuel System Design SRP titled, “Post-irradiation Surveillance,” for the SRP in effect as of the date of the ABWR Design Certification (Revision 2). In the current revision of the SRP (Revision 3), the “Post-irradiation Surveillance” section is renumbered to 4.2.II.4.C. Since the SRP version in effect as of the ABWR DC is the Revision 2 version, the reference to the SRP section as currently stated is correct.

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

RAI 04.02-2:

QUESTION:

The standard administrative departure in STP-3/4 COL was identified to be in Table 4D-1 on pg. 4D-7. Page 4D-7 refers to the page in the ABWR DCD. This corresponds to page 4D-5 in the STP-3/4 COL. Provide clarification of this inconsistency in the STP-3/4 COL text.

RESPONSE:

The administrative departure makes a change to the ABWR DCD, and as such identifies the affected page in the ABWR DCD. Although this may be slightly unclear, the reference is adequate and therefore no change to the COLA is necessary.

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

RAI 04.06-2:**QUESTION:**

In Section 4.6.1.2.3, "Hydraulic Control Units", Standard Departure 4.6-1 deletes the phrase "a small pump and associated", so that the text would read "The test fixture contains hydraulic controls to pressurize the underside of the hollow piston." Since hydraulic controls alone cannot perform the pressurization function, please clarify the intended description of the special test fixture and revise FSAR accordingly.

RESPONSE:

As also stated in the same paragraph in Section 4.6.1.2.3, STD DEP 4.6-1 revises this paragraph to state that the water for the test fixture is supplied from the CRD pump discharge line. This was changed from the original DCD design, which used a pump to draw water from the CRD pump suction line. Since the design is revised to use water from the discharge (i.e. pressurized) side of the CRD pump, the CRD pump provides the pressure, and thus the test fixture need only have the appropriate hydraulic controls to direct the CRD pump flow to the port. This change is also described in the departure description for STD DEP 4.6-1 in COLA Part 7 Section 3.0.

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

RAI 04.06-3:**QUESTION:**

In Section 4.6.1.2.4.1, it is stated that "Approximately 4 L/min purge flow is provided to the NBS reference leg instrument lines." Provide the basis (assumptions, boundary conditions, references) for this value.

RESPONSE:

The water level instrumentation flow control system purge flow rates are based upon the results of the BWR Owners' Group testing as required by ABWR DCD Tier 2 Subsection 5.2.5.2.1(12). For reference, this report is GENE-637-019-0893, "Analysis Guidelines for Backfill Modification of RPV Water Level Instrumentation," Rev. 0.

Note that the flow rate per the reference report was incorrectly transcribed into COLA Part 2 Tier 2 Section 4.6.1.2.4.1(4). The value per the reference report is 4 lb/hour (0.03 L/min). As a result, the COLA must be modified to correct this error.

The COLA change as described above is provided in the following markup. The text that will be changed from COLA Revision 2 is highlighted with gray shading.

4.6.1.2.4.1 Hydraulic Requirements

The CRDHS process conditions are shown in Figure 4.6-9. The hydraulic requirements, identified by the function they perform, are:

- (4) Approximately 4-0.03 L/min purge flow is provided in the NBS reference leg instrument lines. The purge flow maintains the RPV water level instrument reference lines filled to address the effects of noncondensable gases in the instrument lines to prevent erroneous reference information after a rapid RPV depressurization event.