



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

July 23, 2009  
U7-C-STP-NRC-090083

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
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Rockville, MD 20852-2738

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

Attached are responses to NRC staff questions included in Request for Additional Information (RAI) letter number 136 related to Combined License Application (COLA) Part 2, Tier 2, Section 6.6.

Attachments 1 through 3 address the responses to the RAI questions listed below:

- RAI 06.06-1
- RAI 06.06-2
- RAI 06.06-3

When a change to the COLA is indicated, the change will be incorporated in the next routine revision of the COLA following the 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.

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

Executed on 7/23/09



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

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Attachments:

1. Question 06.06-1
2. Question 06.06-2
3. Question 06.06-3

cc: w/o attachment except\*  
(paper copy)

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**RAI 06.06-1:****QUESTION:**

COL License Information Item 6.6.9.1 states in part that the initial Inservice Inspection (ISI) examinations conducted during the first 120 months of operation will comply, to the extent practical, with the requirements of the ASME Code Section XI Edition and Addenda incorporated by reference in 10 CFR 50.55a(b) on the date 12 months prior to the date of issuance of the operating license, subject to the modifications listed in the regulations. 10 CFR 50.55a(g)(3)(ii) requires that Class 2 and 3 components and supports will be designed to enable the performance of ISI examinations during the initial 120 month interval. The regulation text stating to the extent practical only applies to subsequent ISI interval ISI examinations. The use of the terminology to the extent practical infers that interferences to the performance of PSI/ISI examinations due to design, geometry, and materials of construction, will be addressed as impractical and that the COL applicant may request relief from the examinations. The staff's expectation is that the regulations be met during construction and that the Code required components and coverage for PSI and ISI examinations be accomplished with no requests for relief due to impracticality during the initial 120 month ISI interval. Please modify the last two paragraphs of Section 6.6.9.1 taking this regulation into consideration.

**RESPONSE:**

STP 3&4 will be fully compliant with the requirements of 10 CFR 50.55a with regard to PSI and ISI examinations. STP 3&4 believes that the COLA statements in Section 6.6.9.1 are consistent with those requirements for the reasons stated below.

The reference to the term "to the extent practical" appears in 10 CFR 50.55a(g)(4) which applies to Subsection 10 CFR 50.55a(g)(4)(i) dealing with ISI requirements for the initial 120 month ISI interval as well as to Subsection 10 CFR 50.55a(g)(4)(ii), which addresses successive 120-month inspection intervals. The referenced section of 10 CFR 50.55a(g)(3)(ii) in this RAI question does not make any reference to the 120 month ISI inspection interval. That section addresses the design of and access to Class 1, Class 2 and Class 3 components and supports consistent with the Code incorporated by reference in Section 50.55a(b) and "applied to the construction of the particular component". The code edition for the ISI requirements specified in 10 CFR 50.55a(g)(4), where the initial 120-month inspection interval applies, is for subsequent editions of the Code after that incorporated in Section 50.55a(b). As a result, the Code requirements for Subsection (g)(3) may be different than those for (g)(4). Although it is not expected that any relief requests will be submitted, it would be impractical to commit to no relief requests based on a Code edition which was issued subsequent to that which is applied to the component design.

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

**RAI 06.06-2:****QUESTION:**

In NUREG-1503, the staff approved the design of the Reactor Pressure Vessel only to the 1989 Edition of the ASME Code, and that the development of the Preservice Inspection/Inservice Inspection (PSI/ISI) program is the responsibility of the COL applicant. COL License Information Item 6.6.9.1 states in part that the initial ISI examinations conducted during the first 120 months of operation will comply, to the extent practical, with the requirements of the ASME Code Section XI Edition and Addenda incorporated by reference in 10 CFR 50.55a(b) on the date 12 months prior to the date of issuance of the operating license, subject to the modifications listed in the regulations. COL License Information Item 5.2.6.2 states that the PSI/ISI program will be based on the 1989 Edition of the ASME Code, Section XI, however Table 1.8-21a states that the PSI/ISI program will conform to 2004 Edition of ASME Section XI. The staff fully supports the use of the latest Edition that is endorsed in 10 CFR 50.55a for COL applicant development of its PSI/ISI program. In addition, it is the staff's expectation that interferences due to design, geometry, and materials of construction be eliminated to enable the performance of ISI examinations in accordance with 10 CFR 50.55a(g) for the first 120 month interval. Please clarify which Edition of the ASME Code that will be used for development of the PSI/ISI program.

**RESPONSE:**

STP 3&4 will be fully compliant with the requirements of 10 CFR 50.55a with regard to PSI and ISI examinations. Consistent with that regulation, the PSI/ISI program will be based on the version of the ASME code incorporated by reference in paragraph (b) on the date 12 months before the date scheduled for initial fuel loading. This is consistent with 10 CFR 50.55a(g)(4), as adopted by the NRC at 72 Fed. Reg. 49,500 (Aug. 28, 2007). Although the provision applicable to combined licenses was omitted when NRC subsequently adopted a revised section 50.55a(g)(4) at 72 Fed. Reg. 71,755 (Dec. 19, 2007), NRC did not discuss deletion of this provision in the Notice of Final Rule, its associated regulatory analysis or any notice of proposed rulemaking. Accordingly, it appears that NRC intends to retain that provision.

FSAR Section 5.2.6.2 will be revised as shown to reflect the latest edition of the ASME Code Section XI as it relates to PSI/ISI.

**5.2.6.2 Plant-Specific ISI/PSI**

The ISI/PSI program will be based on the ~~1989~~ 2004 ASME Boiler and Pressure Vessel Code Section XI, no addenda (as identified on Table 1.8-21a). This code will be used for selecting of components for examinations, identifying components subject to examination, a description of the components exempted from examination by applicable code, and isometric drawings used for examination.

**RAI 06.06-3:****QUESTION:**

STD DEP 6.6-1 to Section 6.6.2.1 deletes ABWR DCD text stating that RHR heat exchanger nozzle to shell welds will be 100% accessible for preservice inspection during fabrication. The staff was unable to determine from the departure if the RHR heat exchanger nozzle to shell welds remain designed to enable the performance of ISI examinations under 10 CFR 50.55a(g)(3)(ii). Please discuss how the regulation under 10 CFR 50.55a(g)(3)(ii) and the ASME Code examination volume will be met during PSI/ISI for your departures since the PSI/ISI operational program must meet the specified regulation.

**RESPONSE:**

The STP 3&4 Residual Heat Removal (RHR) heat exchanger will be designed for 100% accessibility for nozzle to shell welds for preservice inspection. As such, it will be fully compliant with 10 CFR 50.55a(g)(3)(ii). The deletion of the statement in STD DEP 6.6-1 as noted in the RAI was intended to address certain changes in the ASME Code requirements relating to RHR nozzle to shell welds inspectability and was in no way intended to remove the requirement for 100% inspectability.

There are no COLA changes as a result of this response.