



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

November 17, 2010
U7-C-STP-NRC-100247

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, M. Tonacci (NRC) to M. McBurnett, "Regulatory Audit Summary of South Texas Project, Units 3 and 4 Combined License Application Revision 3 - Operational Programs," dated September 1, 2010 (ML102230215)

Attached are revised and supplemental responses to NRC staff questions included in Request for Additional Information (RAI) letter numbers 268 and 340 related to Combined License Application (COLA) Part 2, Tier 2, Section 3.11, "Environmental Qualification of Safety-Related Mechanical and Electrical Equipment." These revised and supplemental responses address NRC actions identified in the Reference above. The Attachments provide the responses to the RAI questions listed below:

03.11-6

03.11-7

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

There are no commitments in this letter.

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

DO91
NRO

STI 32782498

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

Executed on 11/17/10



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

jep

Attachments:

1. RAI 03.11-6, Revision 1
2. RAI 03.11-7, Supplement 1

cc: w/o attachments and enclosure except*
(paper copy)

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RAI 03.11-6, Revision 1**QUESTION:**

The applicant is requested to fully describe the proposed site-specific operational EQ program (based on STP 1 & 2) in Subsection 3.11.7 of the STP Units 3 & 4 FSAR and note any differences with the mechanical environmental qualification program as approved by the NRC in NUREG-1503 and NEDE-24326-1-P, 1983. For mechanical components, also describe the qualification methods and record keeping requirements for the site-specific operational program. Also, state if this program will include electrical/I&C equipment and, if so, fully describe the program with respect to electrical/I&C equipment.

Subsection 3.11.7 of the STP Units 3 & 4 FSAR provides a site-specific supplement for the operational description of the STP Units 3 & 4 Environmental Qualification (EQ) Program and states that the EQ Program for STP Units 3 & 4 will be consistent with the STP Units 1 & 2 Program, taking into consideration the appropriate differences between new and existing units. The FSAR references the STP 1 & 2 EQ Program without sufficient detail.

REVISED RESPONSE:

The original response to this RAI was submitted with STPNOC letter U7-C-STP-NRC-090170, dated October 12, 2009. The original response is completely superseded by this revised response. The revised portions of the response are marked with revision bars.

The following provides the requested information:

1. The STP Units 3 and 4 Equipment Qualification Program will be used as stated in the response to RAI 03.11-1. It includes the operational program for environmental qualification (EQ) for safety-related mechanical and electrical equipment, including instrumentation and control (I&C) equipment. The program is consistent with NEDE-24326-1-P, 1983, as reviewed in Section 3.11.2.2 of NUREG-1503 for program requirements for mechanical environmental qualification. The EQ program is also consistent with the EQ descriptions contained in DCD Tier 2, Section 3.11 and COLA Part 2, Tier 2, Section 3.11. The COL License Information described in COLA Part 2, Tier 2, Sections 3.11.6 and 3.11.6S will be included in the EQ program.
2. As described in the response to RAI 03.11-5, the vendors are required to provide the EQ information that will be needed during construction and subsequent operation of STP Units 3 and 4. Programs for preventive maintenance, surveillance, and periodic testing, which provide for replacement of parts and equipment prior to the end of qualified life will be included into the STP Units 3 and 4 EQ program, before the fuel load, as part of the EQ Program, Item 3 of COLA Part 2, Tier 2, Table 13.4S-1.

3. The EQ program will include specific administrative and quality assurance activities, such as design changes, procurement, work control, and maintenance. It also administers procedural controls for evaluating changes, preparing documentation, maintaining databases, calculating qualified life of components, performing various technical evaluations, and reviewing equipment purchase specifications. Documentation of these procedural activities will be prepared, before the fuel load, as part of the STP Units 3 and 4 EQ Program, Item 3 of COLA Part 2, Tier 2, Table 13.4S-1.

The initial response to the above RAI contained references to the STP Units 1 & 2 EQ program. The purpose of this revision is to address one of the actions identified in NRC letter report (ADAMS Accession No. ML102230215) dated September 1, 2010, "Regulatory Audit Summary of South Texas Project, Units 3 and 4 Combined License Application Revision 3—Operational Programs." Specifically, that report identified the need to revise the response to RAI 3.11-6 to delete the reference to the STP Units 1 & 2 Environmental Qualification (EQ) Program.

The response to RAI 3.11-7 (provided in STPNOC Letter U7-C-STP-NRC-100115, dated May 27, 2010), and incorporated in COLA Revision 4, eliminated the reference to the STP Units 1 & 2 EQ Program and provided operational program description of the STP 3 & 4 EQ Program previously provided in response to RAI 03.11-6 in a markup of COLA Part 2, Tier 2, Subsection 3.11.7.

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

RAI 03.11-7, Supplement 1**QUESTION:**

Subsection 3.11.7 “Operational Information,” of the STP Units 3 & 4 FSAR states the following: “The EQ Program for STP 1 & 2 has been reviewed and approved by the NRC (NUREG-0781 Supplement 4, Safety Evaluation Report Related to the Operation of South Texas Projects Units 1 & 2”) and has been fully implemented. The EQ Program for the STP 3 & 4 will be consistent with the STP 1 & 2 Program, taking into consideration the appropriate differences between the existing and new units.”

As discussed in Regulatory Guide 1.206 and Commission Paper SECY-05-0197, COL applicants must fully describe their operational programs to avoid the need for ITAAC regarding those programs. Therefore, the NRC staff requests that STPNOC delete reference to the STP 1 & 2 operating plant EQ program and address the operational aspects of the EQ program in the STP Units 3 & 4 FSAR.

SUPPLEMENTAL RESPONSE:

The initial response to the above RAI was provided in STPNOC Letter U7-C-STP-NRC-100115, dated May 27, 2010. The purpose of this Supplemental Response is to address one of the actions identified in NRC letter report dated September 1, 2010, “Regulatory Audit Summary of South Texas Project, Units 3 and 4 Combined License Application Revision 3—Operational Programs.” Specifically, this report identified the need to revise the STP 3 & 4 COLA to reference QME-1-2007, Appendix QR-B for the qualification of non-metallic subcomponents of mechanical equipment.

To address the action stated in the NRC report, the STP 3 & 4 COLA will be revised to reference QME-1-2007, Appendix QR-B for the qualification of non-metallic subcomponents of mechanical systems.

STP 3 & 4 COLA Part 2, Tier 2, Subsection 3.11.6S will be changed as shown below. Changes to COLA Revision 4 are identified in gray shading:

3.11.6S Qualification of Mechanical Equipment

To respond to RG 1.206 the following supplemental information is being provided. The process for determining the suitability of environmentally sensitive soft parts in mechanical equipment has been established for all commodities and sub-components of mechanical equipment that perform a safety-related function by adherence to the requirements of NEDE-24326-1-P "General Electric Environmental Qualification Program." This specification invokes the requirements of the applicable IEEE standards (e.g. 323 and 344), which will ensure that any elastomer, seal or lubricant used in mechanical equipment will be capable of performing the respective safety function under the environmental conditions to which it is subjected. Additionally, non-metallic subcomponents of mechanical equipment will be qualified in accordance with QME-1-2007, Appendix QR-B.

As stated in DCD Chapter 3.11.1, safety-related mechanical equipment are defined and specified in DCD Chapter 3.2. Specifically, for mechanical components, the requirements of DCD Chapter 3.9 ensure that any safety-related function is capable of being performed, including passive functions such as pressure boundary integrity. The documentation requirements of DCD Chapter 3.2.6 and 10CFR50 Appendix B ensure that the materials used will be capable of performing the safety-related functions defined for mechanical equipment and components. These requirements ensure that the constituent parts of a safety-related assembly or component is capable of performing its required function during normal, abnormal, test, design basis accident and post-accident environmental conditions.