

South Texas Project Electric Generating Station 4000 Avenue F – Suite A Bay City, Texas 77414

May 18, 2009 U7-C-STP-NRC-090046

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

Reference:

Letter, Jessie Muir to Scott Head, "Request for Additional Information, Letter Number Three Related to the Environmental Report for the South Texas Combined License Application", dated April 22, 2009, ML0909060303

The referenced letter identified five Requests for Additional Information (RAIs) related to the Environmental Report for the South Texas Project Units 3 & 4 Combined License Application (COLA). Attached are responses to two of these NRC questions (03.05.04-01 and 05.04.01-01(b)). Note that a "b" designation has been assigned to response 05.04.01-01 to prevent any confusion associated with the duplicate use of this RAI number.

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

DOG I NKO STPNOC has agreed to provide responses to the remaining RAIs in accordance with the following schedule:

RAI	Response Timeframe	Due to NRC
05.04.02-01	90 days	July 21, 2009
05.02-04	105 days	August 5, 2009
05.02-05	105 days	August 5, 2009

• There are no commitments in this letter.

If you have any questions, please feel free to contact me at (361) 972-7136, or Russell W. Kiesling at (361)-972-4716

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

Executed on 5/18/09

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

rwk

Attachments:

- 1) Question 03.05.04-01
- 2) Question 05.04.01-01(b)

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

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Question Number: 03.05.04-01

RAI Summary

Explain the apparent discrepancy in solid radwaste volumes presented in the ER and FSAR tables versus the FSAR text and provide corrected text or tables.

Full Text (Supporting Information)

Section 3.5.4 of ER Rev 2 provides a description of the solid waste management system. The annual volumes of solid radwaste to be shipped for disposal are presented in Table 3.5-12, which is excerpted from Table 11.4-3 provided in the FSAR. Table 11.4-3 of the FSAR and Table 3.5-12 of ER Rev 2, indicate the estimated shipped volumes when summed are approximately 473.5 m^3/y . However, based on text provided in the FSAR page 11.4-8, staff calculated annual waste volumes as 1980 ft³/y Class B and 27,840 ft³/y Class A for a total of 29,820 ft³/y which is approximately 845 m³/y. Provide an explanation for this apparent discrepancy in the solid waste volumes or provide corrected waste volume information.

Response:

Reference STPNOC response to RAI 11.04-3 where the conflicting text has been replaced in FSAR Section 11.4.2.2.6.

Candidate COLA Revision:

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

RAI Number 05.04.01-01(b)

RAI Summary

Clarify which data sources were used to determine the impact of liquid and gas releases and provide corrected ER text as appropriate.

Full Text (Supporting Information)

Table 12.2-22 of the FSAR and Table 3.5-1 of the ER have been updated based on a departure from the ABWR DCD because the applicant wants to eliminate the forced-circulation concentrator and use mobile filter technology. However, on page 5.4-1 of ER Rev 2, the applicant states "The released quantities have been estimated in Tables 12.2-20 (gases) and 12.2-22 (liquids) of the ABWR DCD." Table 12.2-20 of the DCD matches Table 12.2-20 of the FSAR and Table 3.5-2 of the ER and corresponds with input found in various GASPAR input files. However, Table 12.2-22 of the ABWR DCD is not being used because of the stated departure and the liquid effluent source term has been updated and replaced by Table 12.2-22 in the FSAR and Table 3.5-1 in the ER. Based on staff review, the updated source term appears to have been used in various LADTAP calculations but is not consistent with text on the stated page. Update the ER text as appropriate.

Response:

For the released quantities of radionuclides in gaseous and liquid effluents, ER Section 5.4.1 incorrectly references Tables 12.2-20 and 12.2-22, respectively, of the ABWR DCD. Each of these DCD tables have been revised for the STP COLA. The correct references for these released quantities should be Tables 3.5-2 and 3.5-1, respectively, of the ER.

Candidate COLA Revision:

The first paragraph of ER Section 5.4.1 will be revised as follows:

Radioactive liquids and gases would be discharged to the environment during normal operation of STP 3 & 4. The released quantities have been estimated in Tables $\frac{12.2 \cdot 20 \cdot (gases) \cdot 3.5 \cdot 1}{12.2 \cdot 22 \cdot (liquids) \cdot 3.5 \cdot 2 \cdot (gases) \cdot 0 \cdot 1}$ (liquids) and $\frac{12.2 \cdot 22 \cdot (liquids) \cdot 3.5 \cdot 2 \cdot 2}{12 \cdot 22 \cdot (liquids) \cdot 3.5 \cdot 2 \cdot 2}$ (gases) of the ABWR DCD. The impact of these releases and any direct radiation to individuals, population groups, and biota in the vicinity of the new units was evaluated by considering the most important pathways from the release to the receptors of interest. The major pathways are those that could yield the highest radiological doses for a given receptor. The relative importance of a pathway is based on the type and amount of radioactivity released, the environmental transport mechanism, and the consumption or usage factors of the receptor.