



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

January 11, 2010
U7-C-STP-NRC-100010

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
Supplemental Response to Request for Additional Information

STPNOC Letter U7-C-STP-NRC-090206 (ML093360350), dated November 30, 2009, provided a supplement to the response to RAI 02.04.12-33, which included the updated STP 3 & 4 numerical groundwater model, "Groundwater Model Development and Analysis for STP Units 3 & 4," Bechtel Power Corporation, December 2008, Revised November 2009." During a teleconference on January 4, 2010, the staff requested that STPNOC provide the "Input and Output Files" used for the November 2009 update of the groundwater model. The requested files are being provided as Supplement 2 to the response to RAI 02.04.12-33. The "Input and Output Files" are contained in the enclosed digital versatile disc (DVD). An attachment to this letter provides the following:

RAI 02.04.12-33, Supplement 2

The DVD enclosed with this letter contains computer model input and output files that were requested by the NRC Staff. The NRC Staff requested that the files be submitted in the native formats required by the software utilized to support development of the STP 3 & 4 COLA. Please note that the files on the enclosed DVDs do not comply with the requirements for electronic submission in NRC Guidance Document, "Guidance for Electronic Submissions to the NRC," dated November 20, 2007.

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
NEW

STI 32596834

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

Executed on 11/11/10



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

rhb

Attachment: RAI 02.04.12-33, Supplement 2

Enclosure: DVD: STPNOC Letter U7-C-STP-NRC-100010
Visual MODFLOW - Input-Output Files (RAI 02.04.12-33, Supplement 2)

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

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RAI 02.04.12-33, Supplement 2:**QUESTION:**

In the review of the document "Groundwater Model Development and Analysis for STP Units 3&4" provided as part of applicant's response to RAI 02.04.12.20, the staff noted that while the purpose of a groundwater flow model for a site goes beyond just calibration, one of the primary bases for determining a model's reliability to predict post-construction conditions is documenting its ability to reproduce existing field observation. The staff conclude from the review (of the FSAR Rev 2 Sections 2.4S.12 and 2.4S.13, and RAI responses including 2008 data and interpretations) that among the critical observed field conditions not reproduced by the existing model one must include (1) a groundwater divide in the Upper Shallow Aquifer in the immediate vicinity of the proposed location for STP Units 3&4, (2) a groundwater divide (that cannot be excluded) in the Lower Shallow Aquifer in the immediate vicinity of the proposed location for STP Units 3&4, and (3) an exposure pathway in the vicinity of Kelly Lake where there is an upward gradient from the Lower to the Upper Shallow Aquifer and the Upper Shallow Aquifer is hydraulically connected to Kelly Lake. Provide either 1) a revised conceptual model to better represent the current observed field conditions, a revised numerical model, its revised results and conclusions, and proposed changes to the FSAR Sections 2.4.12 and 2.4.13, or 2) a justification of why these inconsistencies between observations and model predictions do not make the model unreliable for these assessments.

Reference: "Groundwater Model Development and Analysis for STP Units 3&4", South Texas Project, U7-C-STP-NRC-080070, Attachment 2, by Bechtel Power, December 2008.

RESPONSE, SUPPLEMENT 2:

STPNOC Letter U7-C-STP-NRC-090146 (ML092710096), dated September 21, 2009, provided the response to RAI 02.04.12-33. STPNOC Letter U7-C-STP-NRC-090206 (ML093360350), dated November 30, 2009, provided a supplement to the response to RAI 02.04.12-33, which included the updated STP 3 & 4 numerical groundwater model, "Groundwater Model Development and Analysis for STP Units 3 & 4," Bechtel Power Corporation, December 2008, Revised November 2009." During a teleconference on January 4, 2010, the staff requested that STPNOC provide the "Input and Output Files" used for the November 2009 update of the groundwater model. The requested files are being provided as Supplement 2 to the response to RAI 02.04.12-33. The "Input and Output Files" are contained in the enclosed digital versatile disc (DVD).

No COLA changes are required as a result of this supplemental RAI response.