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

October 27, 2008
ABR-AE-08000078

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 and Response Date Extensions

Reference: Letter, R. Anand to S. Head, "Request for Additional Information Letter No. 59 Related to the SRP Section 02.02.03 for The South Texas Combined License Application," dated September 12, 2008 (ML082560201)

The purpose of this letter is to provide the attached responses to NRC staff questions and to extend the dates for submitting responses to the three remaining questions included in the referenced Request for Additional Information (RAI) letter. Attachments 1 and 2 to this letter contain the responses to RAI question numbers 02.02.03-3 and 02.02.03-5. Attachment 3 to this letter identifies the RAI questions that require extensions and includes the reasons for extension and the date by which each response is expected to be submitted to the NRC staff.

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 there are any questions regarding these responses or date extensions, 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 10/27/08

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

ccc

Attachments:
1. Question 02.02.03-3
2. Question 02.02.03-5
3. Response Date Extensions for RAI Questions

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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

Richard A. Ratliff
Bureau of Radiation Control
Texas Department of State Health Services
1100 West 49th Street
Austin, TX 78756-3189

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

Steve Winn
Eddy Daniels
Joseph Kiwak
Jim von Suskil
NRG South Texas 3/4 LLC

Jon C. Wood, Esquire
Cox Smith Matthews

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

RAI 02.02.03-3:

QUESTION:

Provide methodology used to determine the confined vapor amount available in terms of TNT equivalent used to calculate minimum safe distance not to exceed one psi incident pressure due to explosion.

RESPONSE:

The response to this RAI question was provided in response to RAI Question 02.02.03-1 submitted to NRC in STP letter ABR-AE-08000039 dated May 29, 2008 (ML081560702).

RAI 02.02.03-5:

QUESTION:
Provide an explanation why the calculated minimum safe distance for Isobutanol, n-Butyl Acetate transported on the water way is higher than for a larger quantity of the same chemical offsite (OXEA Corp) (see Table 2.2S-10).

RESPONSE:
The apparent anomaly between minimum safe distances and chemical quantity is due to the release conditions. It is assumed that chemicals transported on the water way are released on water, whereas chemicals located at the OXEA Corp facility are released on the default soil. Releasing the chemicals on water leads to higher evaporation rates. This is because in ALOHA the heat transfer from water is generally greater than that of any of the other ground types (ALOHA 2006). The heat transfer is greater on water because the water stays at a more constant temperature than any of the other ground types due to recirculation. As the chemical absorbs energy from the water and evaporates, the water cools and sinks and is replaced by warmer water. It is assumed that both water and the default soil are the same initial temperature as the surrounding air.

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

Reference:

(ALOHA 2006) Areal Locations of Hazardous Atmospheres (ALOHA) User's Manual, EPA and NOAA, February 2006.

Response Date Extensions for RAI Questions

RAI Question	**Reason for Extension**	**Extended Response Date**
02.02.03-4	Additional time is needed by the team that performed the original analysis to verify all data collected is correct, compiled and organized in order to be presented as a complete response.	November 21, 2008
02.02.03-6	Additional time needed to revise calculations to address IDLH concentration for 1-Hexene	November 21, 2008
02.02.03-7	Additional time needed to revise calculations to address IDLH concentration for 1-Hexene and CO	November 21, 2008