

April 16, 2008

Mr. Gregory Gibson, Manager  
Regulatory Affairs  
South Texas Project Nuclear Operating Company  
P. O. Box 289  
Wadsworth, TX 77483

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 18 RELATED TO  
THE SRP SECTION 02.03.04 FOR THE SOUTH TEXAS COMBINED LICENSE  
APPLICATION

Dear Mr. Gibson:

By letter dated September 20, 2007, South Texas Project Nuclear Operating Company (STPNOC) submitted for approval a combined license application pursuant to 10 CFR Part 52. The U. S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 45 days of the date of this letter. If changes are needed to the safety analysis report, the staff requests that the RAI response include the proposed wording changes.

Mr. Gregory Gibson

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If you have any questions or comments concerning this matter, you may contact me at 301-415-1146 or [Raj. Anand @nrc.gov](mailto:Raj.Anand@nrc.gov), or you may contact George Wunder at 301-415-1494 or [George.Wunder@nrc.gov](mailto:George.Wunder@nrc.gov).

Sincerely,

**/RA/**

Raj Anand, Project Manager  
ESBWR/ABWR Projects Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-012  
52-013  
eRAI Tracking No: 141

Enclosure:  
Request for Additional Information

cc: William Mookhoek

Mr. Gregory Gibson

-2-

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Request for Additional Information

cc: William Mookhoek

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NRO-002

OFFICE	SBPB/TR	SBPB/BC	NGE2/PM	OGC	NGE1/L-PM
NAME	RHarvey*	CCox*	RAnand*	SBrock*	GWunder*
DATE	4/9/08	4/9/08	4/10/08	4/12/08	4/16/08

\* **Approval captured electronically in the electronic RAI system.**

**OFFICIAL RECORD COPY**

South Texas Project Units 3 and 4  
South Texas Project Nuclear Operating Co  
Docket No. 52-012 and 52-013  
SRP Section: 02.03.02 - Local Meteorology  
Application Section: 2.3S.2

QUESTIONS

02.03.02-3

Discuss the influence of the Gulf of Mexico and the resulting land and seabreezes on local meteorology

02.03.02-4

Both FSAR Sections 2.3S1.1 and 2.3S.2.1 state that long-term data from Victoria were used to describe the general climatic conditions at the STP site; FSAR Section 2.3S.2.1 also states that Victoria data were used to describe the site extreme climatology. FSAR Section 2.3S.2.1 further states that the monthly mean daily maximum and minimum temperatures are more extreme at Victoria compared to those measured at Palacios; therefore, Victoria data were used to describe the site extreme climatology. However, the staff notes that Victoria is located significantly further from the Gulf of Mexico as compared to either Palacios or the STP site and the climatic data tables associated with Chapter 28 of the 2005 ASHRAE Handbook – Fundamentals show that the Palacios 0.4%, 1%, and 2% exceedance wet-bulb values exceed the corresponding Victoria wet-bulb values by approximately 1°C. FSAR Section 2.3S.2.1 states that consecutive hourly data are not available at Palacios during the period of March, 1959 through December, 1999. However, the staff was able to download 1988–2007 Palacios hourly data from the National Climatic Data Center (NCDC) Climate Data website. FSAR Section 2.3S.3.4.1.4 further states that Palacios is considered to be representative of the STP site and data collected at Palacios from 1997 through 2001 were used to predict cooling tower plume impacts resulting from operation of the STP 3 and 4 reactor service water mechanical draft cooling towers.

(a) Justify not including meteorological data from Palacios in the review of average wind direction and wind speed conditions as discussed in FSAR Section 2.3S.2.2.1.

(b) Justify not including meteorological data from Palacios in the review of atmospheric water vapor as discussed in FSAR Section 2.3S.2.2.5.

(c) Justify not including meteorological data from Palacios in the review of fog as discussed in FSAR Section 2.3S.2.2.6.