February 5, 2014

Mr. Scott Head, Manager Regulatory Affairs Nuclear Innovation North America, LLC 122 West Way, Suite 405 Lake Jackson, TX 77566

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 445 RELATED TO SRP SECTION 1.5 FOR NUCLEAR INNOVATION NORTH AMERICA, LLC COMBINED LICENSE APPLICATION

Dear Mr. Head

By letter dated September 20, 2007, South Texas Project (STP) 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 **30** 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.

S. Head

If you have any questions or comments concerning this matter, I can be reached at 301-415-8484 or by e-mail at <u>Tom.Tai@nrc.gov</u>.

Sincerely,

/RA/

Tom M. Tai, Senior Project Manager LB3 Branch Division of New Reactor Licensing Office of New Reactors

Docket Nos. 52-012 52-013

eRAI Tracking No. 7420

Enclosure: Request for Additional Information

cc: William Mookhoek Richard Scheide S. Head

If you have any questions or comments concerning this matter, I can be reached at 301-415-8484 or by e-mail at <u>Tom.Tai@nrc.gov</u>.

Sincerely,

/**RA**/

Tom M. Tai, Senior Project Manager LB3 Branch Division of New Reactor Licensing Office of New Reactors

Docket Nos. 52-012 52-013

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Enclosure: Request for Additional Information

cc: William Mookhoek Richard Scheide

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OFFICE	BPTS/TR	BPTS/BC	LB3/PM
NAME	CLi	EMckenna	TTai
DATE	2/4/14	2/5/14	2/5/14

*Approval captured electronically in the electronic RAI system. OFFICIAL RECORD COPY

Request for Additional Information 445

Issue Date: 02/05/2014 Application Title: South Texas Project Units 3 and 4 - Dockets 52-012 and 52-013 Operating Company: South Texas Project Nuclear Operating Co Docket No. 52-012 and 52-013 Review Section: 01.05 - Other Regulatory Considerations Application Section:

QUESTION

01.05-32

In the "Integrated Plan", it states the following relating to the long term water supply.

After 36 hours, Phase 3 has started and once the water in the FWSTs is depleted, operator action would be necessary to shift ACIWA suction to the volume of water in the UHS basin. (Appendix 1E).

A permanent piping connection to allow the ACIWA System to take suction from the water volume in the UHS Basins will be installed with the appropriate separation of safety related and non-safety related systems.

Reactor Service Water and Residual Heat Removal Systems (including pumps) which are located below grade are designed to survive all defined BDBEEs. The approximately 16 million gallon UHS is rendered inoperable solely due to the loss of AC power. (FSAR Subsection 9.2.5)

Please clarify the following question to demonstrate the design capability of the water being transported from UHS basin to the ACIWA connection in RHR system.

a) Clarify whether the water from UHS basin to ACIWA connection at RHR system is through planned "permanent piping connection" or through installed safety-related piping and pumps of the Reactor Service Water (RSW) system.

b) Clarify the equipment qualification of the "permanent piping connection" to justify that it can survive a designed BDBEE and perform its intended function for long term water supply.

c) Update the integrated plan accordingly.