

April 29, 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. 446 RELATED TO  
SPENT FUEL POOL RACK TECHNICAL REPORT (HI-2135462) FOR THE  
NUCLEAR INNOVATION NORTH AMERICA'S SOUTH TEXAS PROJECT  
UNITS 3 AND 4 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

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If you have any questions or comments concerning this matter, I can be reached at 301-415-5207 or by e-mail at [Jessica.Umana@nrc.gov](mailto:Jessica.Umana@nrc.gov) or you may contact Tom Tai at 301-415-8484 or [Tom.Tai@nrc.gov](mailto:Tom.Tai@nrc.gov).

Sincerely,

**/RA/**

Jessica M. Umana, Project Manager  
Licensing Branch 3  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-012  
52-013

eRAI Tracking No. 7509

Enclosure:  
Request for Additional Information

cc: Richard Bense  
William Mookhoek

S. Head

-2-

If you have any questions or comments concerning this matter, I can be reached at 301-415-5207 or by e-mail at [Jessica.Umana@nrc.gov](mailto:Jessica.Umana@nrc.gov) or you may contact Tom Tai at 301-415-8484 or [Tom.Tai@nrc.gov](mailto:Tom.Tai@nrc.gov).

Sincerely,

**/RA/**

Jessica M. Umana, Project Manager  
Licensing Branch 3  
Division of New Reactor Licensing  
Office of New Reactors

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Request for Additional Information

cc: Richard Bense  
William Mookhoek

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NRO-002

OFFICE	MCB:TR	MCB:BC	LB3:PM	LB3:LPM	LB3:BC
NAME	DSaenz*	Fstvan*	JUmana*	TTai*	RJenkins, TTai* for
DATE	4/24/2014	4/24/2014	4/29/2014	4/29/2014	4/29/2014

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

**OFFICIAL RECORD COPY**

## **Request for Additional Information 446**

Issue Date: 04/29/2014

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: 09.01.01 - Criticality Safety of Fresh and Spent Fuel Storage and Handling

Application Section: 9.1.1

### QUESTIONS

09.01.01-16

Item 3 of Table 2.5.6 of the ABWR DCD Tier 1 contains the following Design Commitment: "The rack arrangement prevents accidental insertion of fuel assemblies between adjacent racks." Since the current spent fuel rack design makes it physically possible for a fuel assembly that is rotated 45 degrees to fit in the gap between four (and three) adjacent racks, provide a justification for the rack design meeting the Design Commitment.