

January 8, 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. 442 RELATED TO
SRP SECTION 1.5 FOR NUCLEAR INNOVATION NORTH AMERICA, LLC
(NINA) 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

-2-

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

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. 7372

Enclosure:
Request for Additional Information

cc: William Mookhoek
Richard Scheide

S. Head

-2-

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

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. 7372

Enclosure:
Request for Additional Information

cc: William Mookhoek
Richard Scheide

Distribution:
PUBLIC
LB3
SGreen, NRO
JMcKirgan, NRO
MSpencer, OGC
RidsNroDsraScvb
RidsNroDnrlLB3

ADAMS Accession No.: ML14013A032

NRO-002

OFFICE	SCVB/TR	SCVB/BC	LB3/PM	OGC
NAME	NChien	JMcKirgan	TTai	MSpencer
DATE	12/23/13	12/23/13	12/23/13	1/ 8 /14

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

OFFICIAL RECORD COPY

Request for Additional Information 442

Issue Date: 01/09/2014

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

QUESTIONS

01.05-29

After reviewing the response to RAI Question 01.05-5, May 2, 2013" (NINA Report), the staff has two questions related to HVAC issues:

1. RCIC Pump Room

RCIC system is required during phase 1, i.e., within 36 hours of the SBO's onset. Per NINA REPORT p.21, RCIC Pump Room has a design bases operating temperature (150.8F) and a high temperature coping strategy for extended operation.

Per ABWR DCD FSAR 5.4.6.1(5),"The RCIC system is designed to perform its vessel water inventory control function without AC power for at least 2 hours. Supporting systems as DC power and the RCIC water supply are designed to support the RCIC system during this time period. Without AC power, RCIC room cooling will not be available. However, room temperature during the 2 hour period will not reach the maximum temperature for which the RCIC equipment has been qualified."

Per ABWR DCD FSAR 5.4.15.2.1, as a COL license information item: "COL applicants will provide the analyses for the as-built facility to demonstrate that the facility has the 8-hour non-design basis SBO capability discussed in Subsection 5.4.6."

Staff request clarification in the integrated plan of a room heat up assessment, prior to fuel load, which shows the RCIC system can achieve the functions relied upon in the mitigating strategy report for the entire duration of Phase 1.

2. RSS Rooms and Control Room

Per NINA REPORT p.41, during phase 1, RSS Rooms has a high temperature coping strategy. Per NINA REPORT p.27, during phase 3, command and control can be re-established in the Main Control Room. ASHRAE (1985) concludes that light work at 110 F and relative humidity up to 50% is tolerable.

Staff requests clarification in the integrated plan on the heat up analysis that would be done prior to fuel load to demonstrate the RSS Rooms during Phase 1 and the Control Room during Phase 3 can achieve their mitigating strategy functions.