

Nuclear Innovation North America LLC 4000 Avenue F, Suite A Bay City, Texas 77414

June 8, 2011 U7-C-NINA-NRC-110078

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 Supplemental Response to Request for Additional Information

Attached is a supplemental response to the NRC staff question included in Request for Additional Information (RAI) letter 359 related to Combined License Application (COLA) Part 2, Tier 2, Sections 6C and 4.4. Attachment 1 addresses the response to the RAI question listed below:

RAI 04.04-4 Supplement 2

This response provides a commitment in COLA Appendix 6C to ensure that the license condition downstream fuel test reflects industry experience with such tests. The commitment is listed in Attachment 2.

If you have any questions regarding this response, please contact me at (361) 972-7136, or Bill Mookhoek at (361) 972-7274.

STI 32878699

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NRD

I declare under penalty of perjury that the foregoing is true and correct.

Executed on <u>6/8/11</u>

EIL

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

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Attachments:

- 1. RAI 04.04-4 Supplement 2
- 2. Commitment

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

Kathy C. Perkins, RN, MBA Assistant Commissioner Division for Regulatory Services P. O. Box 149347 Austin, Texas 78714-9347

Alice Hamilton Rogers, P.E. Inspections Unit Manager Texas Department of Health Services P. O. Box 149347 Austin, Texas 78714-9347

\*Steven P. Frantz, Esquire A. H. Gutterman, Esquire Morgan, Lewis & Bockius LLP 1111 Pennsylvania Ave. NW Washington D.C. 20004

\*Stacy Joseph \*Tekia Govan Two White Flint North 11545 Rockville Pike Rockville, MD 20852 (electronic copy)

\*George F. Wunder \*Stacy Joseph \*Tekia Govan Charles Casto U. S. Nuclear Regulatory Commission

Jamey Seely Nuclear Innovation North America

Peter G. Nemeth Crain, Caton & James, P.C.

Richard Peña Kevin Pollo L. D. Blaylock CPS Energy

#### RAI 04.04-4 Supplement 2

## **QUESTION**:

During the NRC staff audit (held on July 12, 2010) of the calculations supporting the downstream fuel effects test acceptance criterion of 5.076 psid (U7-C-STP-NRC-100044 dated February 22, 2010), the staff discovered that the calculations were based on Optima II fuel rather than the GE-7 fuel approved in the ABWR DCD. Explain how the proposed criterion is suitable for the fuel design that is currently the basis for the ABWR design.

### **SUPPLEMENTAL RESPONSE:**

The initial response to this RAI was provided by STPNOC Letter No.U7-C-STP-NRC-110006 dated January 6, 2011. The response provided a complete markup of Appendix 6C, superseding previous markups of the Appendix. This supplemental response provides a markup to Subsection 6C.3 to add a commitment to reflect industry experience with downstream testing in the final downstream test procedure that is provided to the NRC for their review six (6) months prior to performance of the test.

The gray shading indicates changes from the RAI response in Letter No. U7-C-STP-NRC-110006.

### 6C.3.1.9 Downstream Fuel Effects Test

Prior to the initial fuel load, a downstream effects test for the fuel is performed to ensure that small debris passing through the suction strainers does not impair the flow to the core. The detailed test procedure will be provided to the NRC at least six months prior to performing the test and will reflect industry experience with performance of such tests, for example consideration of fuel assembly geometry, debris addition and test protocol, number of tests, and provisions for assessing test variability (COM16C:2). The following discusses the test plan, the analysis basis, and the debris assumptions used for this test.

# Commitment

<b>Commitment Number</b>	Commitment Summary	Milestone Date
	The detailed test procedure for the	Six (6) months prior to
COM 6C-2	downstream fuel test will be provided	performance of the
	to the NRC at least six months prior	downstream fuel test.
	to performing the test and will reflect	
	industry experience with performance	
	of such tests, for example	
	consideration of fuel assembly	
	geometry, debris addition and test	
	protocol, number of tests, and	2
	provisions for assessing test	
	variability	