



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483



February 8, 2010
U7-C-STP-NRC-100037

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 No. 52-001
Response to Request for Additional Information

Reference: Letter, Mark McBurnett to Document Control Desk, "Application to Amend the Design Certification Rule for the U.S. Advanced Boiling Water Reactor (ABWR)," dated June 30, 2009, U7-C-STP-NRC-090070 (ML092040048).

This letter provides responses to Request for Additional Information (RAI) Letter Number 10 related to the application to amend the ABWR DCD Part 2, Tier 2, Section 1.0 provided in Attachment 1 to the referenced letter. This submittal completes the response to this RAI letter.

The attachment to this letter provides the response to RAI question 01-2.

There are no commitments in this letter.

If you have any questions, please contact Scott Head at (361) 972-7136, or Bill Mookhoek at (361) 972-7274.

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

Executed on 2/8/10

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

fjp
Attachment: Question 01-2

cc: w/o attachments and enclosure except*
(paper copy)

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RAI 01-2**QUESTION**

On June 30, 2009, South Texas Project Nuclear Operating Company (STPNOC) submitted an application to amend the ABWR design certification to comply with the aircraft impact rule.

In a letter of intent dated February 11, 2009, STPNOC's parent company, NRG, advised the agency that a joint venture with Toshiba has been formed to create Nuclear Innovation North America LLC (NINA) to submit an application for renewal of the ABWR certification in accordance with 10CFR52.57. The renewal application will include the updates and revisions consistent with the STP Units 3 and 4 Combined License Application

Based upon these representations to the NRC, the staff believes that STPNOC is intending, either by itself or in conjunction with other entities, to supply the design of the amended ABWR (including design and engineering services within the scope of the certified design as amended) to third parties. Under such circumstances, the NRC staff's position is that STPNOC must demonstrate that they meet the same technical qualification requirements as an original applicant for design certification in accordance with 10CFR52.47(a)(7). Please provide additional information demonstrating that STPNOC is technically qualified to supply the entire amended ABWR design.

Based on technical meetings and interactions with STPNOC and its EPC team, it is understood that Toshiba and Westinghouse have been involved in preparing this amendment application. Please explain the legal and contractual relationship between STPNOC and Toshiba, and STPNOC with Westinghouse in its current and future development of ABWR design certification activities.

RESPONSE

STPNOC desires to pursue the option of being the responsible supplier for only the amended portion of the ABWR design certification, which was limited to changes needed to address the requirements of 10CFR50.150, the Aircraft Impact Rule.

1. Please provide additional information demonstrating that STPNOC is technically qualified to supply the entire amended ABWR design.

STPNOC is responsible for the licensing, operation, maintenance, modification, decontamination, and decommissioning of STP 1 & 2. STPNOC has fulfilled this role since 1997, and has had extensive experience with design of nuclear structures, systems and components.

STPNOC is responsible for the licensing and development of STP Units 3 & 4, including the detailed design of these two planned ABWR units. The South Texas Project Units 3 & 4 Quality Assurance Program (QAP) provides for control of STP Units 3 & 4 licensing, design, construction/pre-operation and operations activities affecting the quality and performance of safety-related nuclear plant structures, systems, and components (SSCs) and certain activities

that are not safety-related, but support safe plant operations, or where NRC guidance establishes program requirements. Appropriate controls assure compliance with 10CFR21 during licensing, design, construction and operation of STP Units 3 & 4. These requirements are passed down to contractors via procurement documents as appropriate, and vendors are qualified in accordance the QA program. STPNOC activities as a supplier will be subject to the same controls.

STPNOC has entered into an engineering, procurement and construction (EPC) contract with Toshiba America Nuclear Energy Corporation (TANE), a Delaware corporation, which is a subsidiary of Toshiba. TANE's obligations include supply of the certified ABWR design for STP Units 3 & 4. TANE is the overall Project Manager, and is performing engineering and other responsibilities. TANE is being assisted by Fluor in the engineering for the balance of plant systems and structures, and by Sargent & Lundy for the detailed design and implementation engineering for the safety-related systems and structures (except generally for systems and components inside the primary reactor containment which are engineered by Toshiba). TANE also is being assisted by Westinghouse Electric (Westinghouse), which is providing engineering for selected systems, primarily fuel and safety analyses and I&C systems, and MPR Associates (MPR), which is providing licensing and technical support in selected areas.

In connection with the EPC contract with TANE, STPNOC evaluated the capability of Toshiba to complete the STP Units 3 & 4 ABWR project to NRC standards, and in particular its qualifications to supply the certified ABWR design in accordance with the requirements of 10CFR52.73. STPNOC provided the NRC with a report of the results of that evaluation, describing in detail the bases on which STPNOC determined that Toshiba is qualified to supply the certified ABWR design. Letter from Gregory T. Gibson to NRC re: "South Texas Project, Units 3 and 4, Submittal of Due Diligence Assessment of Toshiba Corporation's Qualification to Supply the Design of the Advanced Boiling Water Reactor," August 19, 2008 (ML082350160).

NRC has conducted an inspection to independently assess the basis upon which STPNOC determined that Toshiba is capable of providing the certified ABWR for STP Units 3 & 4. Based on the inspection, the NRC concluded that STPNOC had adequately demonstrated Toshiba's qualification to supply the certified U.S. ABWR for STP Units 3 & 4. Letter from John A. Nakoski to Mark A. McBurnett, STPNOC, re: "NRC INSPECTION REPORT 05200012/2009-202 AND 05200013/2009-202," August 28, 2009 (ML092370709). The STPNOC Due Diligence Assessment and the NRC Inspection Report provide additional details regarding the qualifications of Toshiba and the members of the Engineering and Procurement Team to supply the entire amended ABWR design, and demonstrate that STPNOC, with the support of Toshiba and its contractors, is technically qualified to supply the entire amended ABWR design, including the amendment to comply with the Aircraft Impact Rule.

Specifically, with respect to the proposed amendment to the design certification to comply with the Aircraft Impact Rule, Westinghouse performed the analyses in accordance with NEI 07-13 with assistance from ERIN Engineering & Research, Inc. (ERIN). ERIN has substantial expertise and familiarity with the methodology described in NEI 07-13, as demonstrated by its significant role on behalf of NEI in the preparation of NEI 07-13. Additionally, Westinghouse

has performed this scope of work for another design certification applicant. Sargent & Lundy is responsible for the structural design. Sargent & Lundy is an experienced nuclear architect engineer and has extensive experience in the design of structures, systems and components for nuclear power plants.

2. Please explain the legal and contractual relationship between STPNOC and Toshiba, and STPNOC with Westinghouse in its current and future development of ABWR design certification activities.

STPNOC is the agent for CPS Energy (CPS) and Nuclear Innovation North America LLC (NINA) and is actively licensing and developing STP Units 3 & 4. CPS is a Texas municipal utility and an independent Board of the City of San Antonio, Texas. NINA is a limited liability company owned 88% by NRG Energy, Inc. (NRG) and 12% by Toshiba. NINA was formed to market and promote ABWR nuclear technology, and develop ABWR nuclear power generation facilities in the U.S. Toshiba, through TANE has agreed to act as the prime contractor on all projects, and NINA is actively marketing the development of other new ABWR projects at existing sites in partnership with other nuclear power companies.

As described above, as agent for CPS and NINA, STPNOC has entered into the EPC contract with TANE for STP Units 3 & 4. TANE has contracted directly with Fluor, Sargent & Lundy, Westinghouse, and MPR for their services in connection with STP Units 3 & 4.

STPNOC will be responsible as a supplier for the scope of the amendment to comply with the Aircraft Impact Rule. STPNOC expects to receive support from TANE and Westinghouse under the contracts described above, or under future agreements, as appropriate.