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

January 30, 2006
NOC-AE-06001968
10CFR50.54(f)

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498 and STN 50-499
Supplement 2 to the Response to Generic Letter 2004-02
(TAC Nos. MC4719 and MC4720)

Reference: Letter, T. J. Jordan to Document Control Desk, "Supplement 1 to the Response to Generic Letter 2004-02", dated August 31, 2005 (NOC-AE-05001922, ML052500311)

In the referenced letter regarding STPNOC's response to Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized Water Reactors", STPNOC committed to provide an update of pending analyses and testing by January 31, 2006. Attachment 1 to this letter provides the current status.

The commitments in this letter are listed in Attachment 2.

If there are any questions regarding this response, please contact Scott Head at (361) 972-7136 or me at (361) 972-7902.

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

Executed on January 30, 2006

T. J. Jordan
Vice President, Engineering

awh/

Attachments:

1. Supplement 2 to the Response to Generic Letter 2004-02
2. List of Commitments

A116

cc:
(paper copy)

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# SUPPLEMENT 2 TO THE RESPONSE TO GENERIC LETTER 2004-02

As previously stated, STP Nuclear Operating Company (STPNOC) will be in full compliance with the regulatory requirements discussed in the applicable regulatory requirements section of GNL 2004-02 by December 31, 2007. This includes the full implementation of all plant modifications and required corrective actions.

STPNOC has a contract in place for Performance Contracting Inc. to provide an advanced design sump strainer for each Unit to replace the current sump screens. The modifications are scheduled to be implemented in Unit 1 during the Fall 2006 refueling outage and in Unit 2 during the Spring 2007 refueling outage. Laboratory testing for the STP specific strainer design is pending. The testing will demonstrate the adequacy of the Net Pump Suction Head margins for the Emergency Core Cooling System and Containment Spray System Pumps. The strainer testing will also include bypass sampling and an evaluation to determine the quantity and characteristics of debris that bypasses the strainer.

A three-dimensional computational fluid dynamics analysis for debris transport is being finalized. The results are expected to yield transport fractions that are smaller than those determined in the baseline transport analysis. This will result in less debris loading on the strainer.

A latent debris walkdown inside containment was previously scheduled for the Fall 2005 refueling outage in Unit 2. This walkdown has been rescheduled to be performed in Unit 1 during power operation prior to the start of the Fall 2006 refueling outage. The at-power walkdown near the end of the fuel cycle is expected to be more representative of latent debris conditions than during an outage when the Unit is shutdown and many maintenance and inspection activities are taking place.

Resolution of the debris blockage issue concerning fuel assemblies is pending. A generic approach is ongoing by the Westinghouse Owners Group that includes evaluation of flow paths within the reactor vessel and evaluation of proposed testing of fuel assemblies in the laboratory. In addition, the results of the strainer bypass tests mentioned above will be used to reduce the fiber loading on the fuel assemblies.

A coatings test will be conducted by Westinghouse to demonstrate that the zone of influence for coatings may be defined using a radius of 5D (5 times the diameter of the break pipe). This result may be used to reduce the debris loading on the sump and to demonstrate margin for the new sump strainer design. The testing is planned to be completed by the second quarter of 2006.

Chemical effects testing and evaluation is being conducted by the Westinghouse Owners Group. The results will be applied by STPNOC to the sump strainer design to show that acceptable NPSH margins are maintained.

STPNOC will provide another supplemental response with an update on the sump performance evaluation upon completion of pending analyses and testing.

# List of Commitments

The following table identifies those actions to which STP Nuclear Operating Company committed in this document. Any statements in this submittal with the exception of those in the table below are provided for information purposes and are not considered commitments. Please direct questions regarding these commitments to Scott Head at (361) 972-7136.

| Commitment | Due Date | Condition Report |
|---|---|---|
| 1. STPNOC will provide a Supplemental Response to Generic Letter 2004-02 upon completion of pending analyses and testing. | August 31, 2006 | 04-12498-11 |