

South Texas Project Electric Generating Station PO Box 289 Wadsworth, Texas 77483

November 12, 2002 NOC-AE-02001339 File No.: G25 10CFR50.55a

U. S. Nuclear Regulatory Commission Attention: Document Control Desk One White Flint North 1155 Rockville Pike Rockville, MD 20852

South Texas Project Units 1 and 2 Docket Nos. STN 50-498, STN 50-499 Revised Request to Implement a Risk-Informed Inservice Testing Program for Pumps and Valves Beginning the Second 10-Year Interval (Relief Request RR-ENG-IST-2-01)

Reference: Letter, Thomas J. Jordan to NRC Document Control Desk, "Request to Implement a Risk-Informed Inservice Testing Program for Pumps and Valves Beginning the Second 10-Year Interval (Relief Request RR-ENG-IST-2-01)," dated May 21, 2001 (NOC-AE-010001088)

In accordance with the provisions of 10CFR50.55a(a)(3)(i), the South Texas Project requested Nuclear Regulatory Commission approval to use an alternative approach to the ASME Section XI Code requirements for determining the testing intervals for pumps and valves (referenced above). The South Texas Project Risk-Informed Inservice Testing Program for Pumps and Valves Engineering Analysis and Executive Summary have been revised to incorporate responses to NRC questions. They are a complete description and analysis of the proposed method and contain the supporting bases for this alternative. Change bars indicate substantive differences from the original submittal.

The Risk-Informed Inservice Testing Program defined in this submittal follows the criteria of Regulatory Guide 1.175, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing." The alternate method will provide an acceptable level of quality and safety as required by Regulatory Guide 1.175 because key safety principles of defense-in-depth and safety margins are maintained.

The South Texas Project has updated the Inservice Testing Program and is now testing pumps and valves in accordance with the 1989 Edition of the Section XI Code, which invokes by reference the 1987 Edition of the O&M Code with 1988 Addenda. During the second 10-year interval, the South Texas Project will continue to comply with the 1989 Edition of the ASME Section XI Code for pumps and valves, except the test intervals will be determined by the Risk-Informed Inservice Testing Program described in this submittal.

Attachment 1 lists the questions from the NRC request for additional information either with a response or a reference to a response.

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Attachment 2 provides the basis for the South Texas Project Risk-Informed Inservice Testing Program for Pumps and Valves. The following table indicates how various sections of Attachment 2 address Regulatory Guide 1.175.

Section of Attachment 2	Subject
1.1	A description of the changes associated with the proposed RI-IST Program
2.1.1	Identification of any changes to the plant's design, operations, and other activities associated with the proposed RI-IST program and the basis for the acceptability of these changes
2.3.2	The process used to identify candidates for reduced and enhanced IST requirements, including a description of the categorization of components using the PRA and the associated sensitivity studies
2.3.1, 2.3.2	A description of the PRA used for the categorization process and for the determination of risk impact, in terms of the process to ensure quality and the scope of the PRA, and how compensation is provided in the integrated decision-making process for limitations in quality, scope, and level of detail
2.3.3	A description of how the impact of the change is modeled in the IST components (including a quantitative or qualitative treatment of component degradation) and a description of the impact of the change on plant risk in terms of CDF and LERF and how this impact compares with the decision guidelines
2.2	A discussion of how the key principles were (and will continue to be) maintained
2.4	The integrated decision-making process used to help define the RI- IST program, including any decision criteria used
2.1.2	A summary of previously approved relief requests for components categorized as HSSC along with exemption requests, technical specification changes, and relief requests needed to implement the proposed RI-IST Program
2.1.2	An assessment of the appropriateness of previously approved relief requests
3.1	A discussion of the testing strategy for each component type according to IST rank. (IST High, IST Medium, and IST Low)
3.2	A summary of the grouping and scheduling of IST components.
3.3	Performance Monitoring attributes for all IST components regardless of Rank
3.4	A discussion of the feedback process using the Condition Report process to assess testing methods and frequencies changes.
3.5	Periodic reassessment of the RI-IST program including review of failure history including changes to PRA.

Attachment 2 also describes the development of test frequencies and testing methodologies and describes the evaluation of cumulative risk impact of testing changes.

Attachment 3 to this letter is the "Risk-Informed Inservice Testing Program Description Summary." This attachment describes the requirements for categorizing components

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using Probabilistic Risk Assessment inputs and blending deterministic information in an Integrated Decision-making Process. The implementation, monitoring and corrective action plans, periodic assessments of the program, and a method for making changes to the program are also described in this attachment.

Attachment 4 contains four reports from the Risk-Informed Inservice Testing database. These reports include valve and pump lists that provide the scope of the inservice testing plan for the second 10-year interval.

Attachment 5 contains the narratives for the IST ranking bases as requested in RAIs 4 and 8.

Attachment 6 lists Category 1 AOVs and Category 2 AOVs in the IST program scope.

If there are any questions, please contact either M. S. Lashley at (361) 972-7523 or me at (361) 972-7902.

Thomas J. Jordan

Vice President, Engineering & Technical Services

BJS/PLW

Attachments:

- 1. Response to Request for Additional Information Regarding the STP Risk-Informed Inservice Testing Program
- 2. Risk-Informed Inservice Testing Program for Pumps and Valves Engineering Analysis - Revised
- 3. Risk-Informed Inservice Testing Program Description Summary Revised
- 4. Valve and Pump Lists for Second 10-Year Interval
- 5. IST Group Narratives
- 6. AOV List including Category 1 AOVs and all IST air-operated valves

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