December 10, 2001

Mr. William T. Cottle
President and Chief Executive Officer
STP Nuclear Operating Company
South Texas Project Electric
Generating Station
P. O. Box 289
Wadsworth, TX 77483

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RE: RISK-INFORMED

INSERVICE INSPECTION APPLICATION FOR SOUTH TEXAS PROJECT,

UNITS 1 AND 2 (TAC NOS. MB1277 AND MB1278)

Dear Mr. Cottle:

By letter dated February 27, 2001 (NOC-AE-01001034), you submitted a request for relief from Section XI examination requirements of the American Society of Mechanical Engineers Code for inservice inspections (ISI) of Class 1 and 2 piping welds. The proposed alternative of a risk-informed ISI program is to provide an acceptable level of quality and safety in accordance with 10 CFR 50.55a(a)(3)(i).

The enclosed information is needed for the NRC staff to complete its review of your application. To expedite the NRC staff's review to meet the agreed upon schedule, the request for additional information was provided to your staff by e-mail on November 19, 2001. Any difference between the enclosed questions and the e-mail is editorial. In a call on the questions with your staff, they agreed to submit the responses to the questions by January 11, 2002. If the responses are submitted by that date, the NRC staff expects to issue its evaluation on schedule. If you have any questions, contact me, lead project manager, at 301-415-1307, or at <a href="mailto:ind@nrc.gov">ind@nrc.gov</a> through the internet.

Sincerely,

/RA/

Jack Donohew, Senior Project Manager, Section 2 Project Directorate IV Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosure: Request for Additional Information

cc w/encl: See next page

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Docket Nos. 50-498 and 50-499 DISTRIBUTION

**PUBLIC** 

Enclosure: Request for Additional Information PDIV-1 Reading

RidsNrrDlpmPdiv(SRichards)
RidsNrrDlpmLpdiv-1 (RGramm)

RidsNrrPMJDonohew RidsNrrLAMMcAllister

RidsOqcRp

RidsAcrsAcnwMailCenter

WJohnson, RIV

SAli

SDinsmore RHernan

ACCESSION NO.: ML013200045 \* RAI received by e-mail dated 11/19/2001

OFFICE	PDIV-2/PM	PDIV-1/LA	EMCB/NRR	PDIV-1/SC
NAME	JDonohew:If	MMcAllister	SAli*	RGramm
DATE	12/10/2001	12/10/2001	11/19/2001	12/10/2001

## REQUEST FOR ADDITIONAL INFORMATION

## SOUTH TEXAS PROJECT, UNITS 1 AND 2

## RISK-INFORMED INSERVICE INSPECTION

## DOCKET NOS. 50-498 AND 50-499

The following are questions on the risk-informed inservice inspection (RI-ISI) submittal dated February 27, 2001, for relief from Section XI examination requirements of the American Society of Mechanical Engineers (ASME) Code for Class 1 and 2 piping welds at South Texas Project, Units 1 And 2 (STP):

- 1. Will the RI-ISI program be updated every 10 years and submitted to the NRC consistent with the current ASME Code, Section XI requirements?
- 2. Under what conditions will the RI-ISI program be resubmitted to the NRC before the end of any 10-year interval?
- 3. Page 8 of the submittal presents the criteria for engineering evaluation and additional examinations if unacceptable flaws or relevant conditions are found during examinations. The submittal states that the evaluation will include whether other elements in the segment or segments are subject to the same root cause conditions. The submittal further states that additional examinations will be performed on these elements up to a number equivalent to the number of elements required to be inspected on the segment or segments initially. Please address the following:
  - (a) Please clarify the term "initially". Specifically, does it refer to inspections planned for the current outage or the current interval?
  - (b) Please clarify how will the elements be selected for additional examinations. Specifically, please verify that the elements will be selected based on the root cause or damage mechanism, and include high risk significant as well as medium risk significant elements (if needed) to reach the required number of additional elements.
- 4. Page 5 of the submittal states that a deviation to EPRI [Electric Power Research Institute] RI-ISI methodology has been implemented in the failure potential assessment for thermal stratification, cycling and striping (TASCS). Please state if the revised methodology for assessing TASCS potential is in conformance with the updated criteria described in EPRI letter to NRC dated March 28, 2001. Also, please confirm that as stated in the subject letter, once the final Materials Reliability Program guidance has been developed, the RI-ISI program will be updated for the evaluation of susceptibility to TASCS, as appropriate.

- 5. The submittal states that the scope includes Category B-J socket welds. Please state what examination method will be utilized for the inspection of socket welds.
- 6. Section 3.6.1 of the submittal states that, for medium consequence category segments, boundary estimates of 1E-4 and 1E-5 were used for the conditional core damage and large early release frequency respectively. What was used for the high consequence category segments?
- 7. Section 1.2 of your submittal states that the Level 2 probablistic safety assessment (PSA) and individual plant examination (IPE) submittal dated August 28, 1992, supplemented by the current probablistic risk assessment (PRA) model, STP\_1997, were used to support the RI-ISI submittal. The October 14, 1999 letter transmitting procedures and diagrams for the proposed Risk Informed Exemption included a copy of the Probabilistic Risk Assessment Program, OPGP04-ZA-0604, Rev. 3. The procedure includes the following two steps.
  - 6.3.8 The overall PRA model results are updated every refueling cycle of Unit 1, not to exceed two years, or when the Risk & Reliability Analysis Administrator determines (using guidance supplied by OPGP01-ZA-0305) an update is required.
  - 6.3.20 Each update cycle, the Updated PRA (including the Updated PRA Computer Model) is documented as "complete" via a signed letter from the Risk & Reliability Analysis Administrator to RMS. Computer codes are maintained in accordance with OPGP05-ZA-0014, "Software Quality Assurance Program."

It appears that the 1997 model (i.e., STP\_1997) referenced in the February 27, 2001, submittal would have been more than two years old when the RI-ISI submittal was being prepared; however, the update procedure indicates that the models should normally be no more than two years old. Please explain the apparent discrepancy of using a "current PRA model, STP\_1997" in the February 27, 2001 submittal.

CC:

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