

From: Thadani, Mohan
Sent: Tuesday, December 28, 2010 1:12 PM
To: Harrison, Albon; Walker, Philip
Subject: RE: TAC Nos. ME4514 and ME4515 - South Texas Project, Units 1 and 2 Relief Request) RR-ENG-2-55 - RAI Enclosed

Wayne

The NRC staff has reviewed the STPNOC relief request ENG-2-55 and has determined that additional information is needed to complete this action. Our request for additional information is provided below'

We request a response to this RAI by January 31, 2011, in order to meet the review schedule.. If there are any questions, please contact me.

Best regards,

Mohan.

REQUEST FOR ADDITIONAL INFORMATION
ON THE SECOND TEN YEAR 10-YEAR INSERVICE INSPECTION INTERVAL
REQUESTS FOR RELIEF
STP NUCLEAR OPERATING COMPANY
SOUTH TEXAS STEAM NUCLEAR POWER PLANT, UNIT 1 AND 2
DOCKET NUMBER: STN 50-498, STN 50-499
(TAC NUMBERS: ME4514, ME4515)

By letter dated July 29, 2010 (Agency Document Access and Management System (ADAMS) Accession Number ML102240169), STP Nuclear Operating Company (the licensee) submitted Request for Relief (RR) RR-ENG-2-55, from the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI for South Texas Project, Units 1 and 2 (STP 1 and 2). Specifically, the ASME Code requires that 100% of the examination volumes, or surface areas, described in Tables IWB-2500 and IWC-2500 be performed during each interval. The request for relief apply to the second 10-year inservice inspection (ISI) interval, in which the licensee adopted the 1989 Edition of ASME Code, Section XI, No Addenda as the Code of record.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(g)(5)(iii), the licensee has submitted the subject requests for relief for limited examinations in multiple ASME Code Examination Categories. The ASME Code requires that 100% of the examination volumes, or surface areas, described in ASME Code, Section XI, Tables IWB-2500, IWC-2500, and IWF-2500 be performed during each interval. The licensee stated that 100% of the ASME Code-required volumes, or surface areas, are impractical to obtain at STP 1 and 2.

10 CFR 50.55a(g)(5)(iii) states that when licensees determine that conformance with ASME Code requirements is impractical at their facility, they shall submit information to support this

determination. The NRC will evaluate such requests based on impracticality, and may impose alternatives, giving due consideration to public safety and the burden imposed on the licensee.

The NRC has reviewed the information submitted by the licensee determined the following information is required to complete the evaluation.

Questions

1. The staff requests that the licensee group relief request into ASME Examination Categories (e.g., group all B-A components). Please provide:
 - a) A written summary for each ASME Code Examination Category, similar to the general summary provided in page 1 and 2 of submittal. Explicitly state the component, ASME Code requirement, basis, and justification for requesting relief for a given ASME Examination Category and Item Number.
 - b) A table summarizing the 'Components for Which Exemption is Requested' must contain a detailed component description (including material specification), a specific reason for limited component coverage (see Question 2 below), and the date the ISI examination was conducted. Note that the table as submitted contains two headings titled 'Component Description.'
 - c) Supporting documentation to justify limited component coverage in this section or in a clearly referenced location (see Question 3 below).

Refer to the June 2004 NEI White Paper, "Standard Format for Requests from Commercial Reactor Licensees Pursuant to 10 CFR 50.55a" as one potential formatting template (ADAMS Accession No. ML070100400).

2. The licensee has provided only general information regarding the impracticality of obtaining ASME Code-required volumetric examination in the written and tabular portion of the submitted relief request. Detailed ISI documentation is provided, but is not used to directly support justification for relief from the ASME Code-required examinations. Further, the language used to explain the bases for relief from the ASME Code-required examination volumes is vague. Specifically, statements such as "[spell out (BMI)] penetration location" or "flange weld configuration" are insufficient to substantiate limited ISI accessibility. The staff requests that the licensee submit detailed and specific information to support the bases for limited examination in the submitted relief request in order to demonstrate impracticality. Please provide:
 - a) Descriptions of the interferences to applied nondestructive examination (NDE) techniques. If sketches or other supporting documents are required, this documentation should be included immediately after the text/table where referenced or the location should be otherwise clearly noted. If the documentation is from the letter dated July 29, 2010, the reference report or drawing number must be cited by page number.
 - b) Descriptions of the NDE equipment (ultrasonic scanning apparatus), details of the listed obstructions (size, shape, proximity to the weld, etc.) to demonstrate accessibility limitations, and discuss whether alternative methods or advanced technologies could be employed to maximize the ASME Code coverage.

- c) Clarification regarding the wave mode(s) and insonification angles used for all ultrasonic examinations.
 - d) Cross-section coverage plots to describe ASME Code volumes examined. This documentation should be included either immediately after the text/table referenced or the location should be otherwise clearly noted.
 - e) A discussion, if surface examination is required by the ASME Code in addition to the volumetric examination, regarding whether any indications were discovered as a result of ASME Code-required examinations, and how these indications have been dispositioned.
3. Please state the actual ASME Code section that was followed for each Examination Category. If ASME Code, Section XI, Appendix VIII-qualified techniques were applied to Examination Categories, please discuss whether this alternative was approved by NRC.
4. In addition to the specific information requested in Question 3 above, discuss whether additional welds could have been examined to address the reduced volumetric coverage resulting from the limited examinations of the ASME Code-required weld ISIs.