

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

May 2, 2001 NOC-AE-01001091 File No.: G09.16 10CFR50.55a

U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555-0001

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Amended Request for Relief from ASME Boiler and Pressure Vessel Code Section XI Subsection IWE-5240 (Relief Request RR-ENG-IWE-06)

Reference:

"Request for Relief from ASME Boiler and Pressure Vessel Code Section XI Subsection IWE-5240 (Relief Request RR-ENG-IWE-06)," T. J. Jordan to NRC Document Control Desk, dated November 27, 2000 (NOC-AE-00000945)

In accordance with the provisions of 10CFR50.55a(a)(3)(i), the South Texas Project requests relief from the requirements of ASME Section XI code subsection IWE-5240 of the 1992 Edition, 1992 Addenda. IWE-5240 requires compliance with the requirements of IWA-5246 (corrected from IWA-5246 to IWA-5240 in the 1993 Addenda) for VT-2 visual examinations following repair or modifications to the pressure-retaining boundary, or replacement of Class MC or Class CC components. VT-2 examinations are conducted to detect evidence of leakage from pressure-retaining components, with or without leakage collection systems, as required during system pressure tests. Alternative pressure testing in accordance with 10CFR50, Appendix J, provides an acceptable level of quality and safety.

This amended request incorporates comments from the NRC staff. New information provided is indicated by a change bar in the margin.

The attached relief request includes a discussion of the basis and justification for the relief request and an implementation schedule. The Electric Power Research Institute previously presented the subject of this proposal to the Nuclear Regulatory Commission in the Containment Inspection Program Guide. The Nuclear Regulatory Commission issued approval on May 10, 1999.

The South Texas Project requests Nuclear Regulatory Commission approval of this relief request by June 30, 2001, to support applicable repair, modification, and replacement activities.

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

Manager,

Nuclear Engineering

**PLW** 

Attachment: Amended Request for Relief from ASME Code Section XI Subsection IWE-5240

(Relief Request RR-ENG-IWE-06)

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Attachment NOC-AE-01001091 File No.: G09.16 Page 1 of 2

# SOUTH TEXAS PROJECT UNITS 1 AND 2 AMENDED REQUEST FOR RELIEF FROM ASME CODE SECTION XI SUBSECTION IWE-5240 (RELIEF REQUEST RR-ENG-IWE-06)

Reference Code: ASME Boiler and Pressure Vessel Code, Section XI, 1992 Edition

## A. <u>Components for Which Exemption is Requested:</u>

(a) Name: Components subject to the rules and requirements for visual examination following repair, replacement or modification under IWE-5000, "System Pressure Tests," in accordance with the 1992 Edition, 1992 Addenda of ASME Section XI.

(b) Function: Pressure retention

(c) Classes: MC and CC

#### B. <u>Code Requirement from Which Relief is Requested:</u>

IWE-5240 of ASME Section XI, 1992 Edition, 1992 Addenda, states that the requirements of IWA-5246 (corrected from IWA-5246 to IWA-5240 in the 1993 Addenda) for visual examination are applicable following repair or modification of pressure-retaining boundaries, or replacement of Class MC and Class CC components. IWA-5240 requires that VT-2 examinations be conducted by examining the accessible external exposed surfaces of pressure-retaining components for evidence of leakage.

The South Texas Project requests relief from performing VT-2 visual examinations in connection with system pressure testing following repair or modification to the pressure-retaining boundaries, or modification of Class MC and Class CC components under Article IWE-5000.

# C. Basis for Relief from Code Requirements:

Table IWE-2500-1, Examination Category E-P, specifies 10CFR50, Appendix J, as the examination method for pressure-retaining components and does not specifically identify application of VT-2 visual examinations. 10CFR50, Appendix J, provides requirements for testing as well as acceptable leakage criteria. VT-2 visual examinations are required primarily to locate potential sources of water or steam leaks from pressure-retaining components. Appendix J applies pneumatic leakage tests to identify sources of leakage.

Attachment NOC-AE-01001091 File No.: G09.16 Page 2 of 2

#### D. Alternative Examination:

Type B and Type C pressure testing conducted in accordance with 10CFR50, Appendix J, will be performed to identify any leakage from the subject welds in lieu of VT-2 examination under IWA-5240 of ASME Section XI. In addition, a general visual examination of the accessible areas shall be performed during or after the pressure test to ensure the overall integrity of the repaired/replaced component.

For any repair or replacement affecting the containment pressure boundary, where a pressure test is deferred or not performed, a VT-1 or detailed visual examination shall be performed to ensure the overall integrity of the repaired/replaced component with the containment.

# E. <u>Justification for Granting Relief</u>:

The integrity of the pressure-retaining boundary and Class MC and Class CC components is assured by implementation of the following requirements:

- Requirements for leak testing:
  - As stated in IWE-5221, repairs or modifications to the pressure-retaining boundary or replacement of Class MC or Class CC components are to be subjected to a pneumatic leakage test in accordance with 10CFR50, Appendix J.
  - Table IWE-2500-1, Examination Category E-P, requires application of 10CFR50, Appendix J examination methods for all containment pressure-retaining components.
  - Appendix J provides requirements for testing as well as acceptable leakage criteria.
- 10CFR50.55a(b)(2)(ix)(E) requires a general visual examination of the containment once each period that would identify any structural degradation that may contribute to leakage.
- Appendix J tests utilize calibrated equipment to provide assurance of leakage rate acceptability.

A VT-2 visual examination will not provide additional assurance of safety beyond that provided by current Appendix J practices. Pressure testing performed in accordance with 10CFR50, Appendix J, provides an acceptable level of quality and safety. Therefore, relief from IWE-5240 is requested in accordance with 10CFR50.55a(a)(3)(i).

#### F. Implementation Schedule:

The South Texas Project requests that the Nuclear Regulation Commission approve this relief request by June 30, 2001, to support applicable repair, modification, and replacement activities.