



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

May 8, 2003
NOC-AE-03001529
10CFR50.55a

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
Request for Approval of ASME Section XI Code Case N-516-2 for the
Second Ten-Year Inservice Inspection Interval (Relief Request RR-ENG-2-30)

Pursuant to 10CFR50.55a(a)(3)(i), STP Nuclear Operating Company (STPNOC) hereby requests NRC approval of ASME Section XI Code Case N-516-2, "Underwater Welding," for use at the South Texas Project. Code Case N-516-2 has been conditionally accepted by the NRC in Draft Regulatory Guide DG-1091. The details of the 10CFR50.55a request are attached.

STPNOC requests approval on an expedited basis by May 22, 2003, based on the schedule for reinstallation of the core barrel in the Unit 1 reactor pressure vessel during the current forced outage. Prior to approval of this request, STPNOC might perform underwater welding in accordance with Code Case N-516-2 to support removal of the Unit 1 core barrel.

If there are any questions regarding this request, please contact Michael S. Lashley at (361) 972-7523 or me at (361) 972-7902.

A handwritten signature in black ink, appearing to read "T. J. Jordan", is written over a white background.

T. J. Jordan
Vice President
Engineering & Technical Services

jtc

Attachment: 10CFR50.55a Relief Request RR-ENG-2-30

STI: 31605580

A047

cc:
(paper copy)

Ellis W. Merschoff
Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

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

Richard A. Ratliff
Bureau of Radiation Control
Texas Department of Health
1100 West 49th Street
Austin, TX 78756-3189

Cornelius F. O'Keefe
U. S. Nuclear Regulatory Commission
P. O. Box 289, Mail Code: MN116
Wadsworth, TX 77483

C. M. Canady
City of Austin
Electric Utility Department
721 Barton Springs Road
Austin, TX 78704

(electronic copy)

A. H. Gutterman, Esquire
Morgan, Lewis & Bockius LLP

L. D. Blaylock
City Public Service

Mohan C. Thadani
U. S. Nuclear Regulatory Commission

R. L. Balcom
Texas Genco, LP

A. Ramirez
City of Austin

C. A. Johnson
AEP Texas Central Company

Jon C. Wood
Matthews & Branscomb

10CFR50.55a Relief Request RR-ENG-2-30**Proposed Alternative
in Accordance with 10 CFR 50.55a(a)(3)(i)****--Alternative Provides Acceptable Level of Quality and Safety--****1. ASME Code Components Affected**

Pressure-retaining components or component supports, including appurtenances, subassemblies, parts of a component, and core support structures, subject to repair by underwater welding or items subject to installation as replacements by underwater welding.

2. Applicable Code Edition and Addenda

American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 1989 Edition with no Addenda.

3. Applicable Code Requirement

IWA-4000 of Section XI does not address underwater welding. However, Code Case N-516-2, "Underwater Welding, Section XI, Division 1," includes alternative procedure, performance, and filler metal qualifications, and alternative examination requirements to those contained or referenced in IWA-4000 for use when the welding is performed underwater.

4. Reason for the Request

Approval of Code Case N-516-2 is requested for applications of underwater welding during the second ten-year inservice inspection interval at the South Texas Project. The need for approval is associated with contingency underwater welding related to removal of the core barrel from the Unit 1 reactor pressure vessel during the current forced outage.

5. Proposed Alternative and Basis for Use

STP Nuclear Operating Company (STPNOC) requests relief from the requirements of IWA-4000 in accordance with 10CFR50.55a(a)(3)(i) in order to perform underwater welding for repairs or for installation of replacement items. IWA-4000 of the Section XI code of record at the South Texas Project does not address underwater welding.

STPNOC requests NRC approval of ASME Section XI Code Case N-516-2 for use at South Texas on the basis that it provides an acceptable level of quality and safety.

The NRC documented their conditional acceptance of Code Case N-516-2 in Draft Regulatory Guide DG-1091 (Proposed Revision 13 of Regulatory Guide 1.147) published in December 2001. However, neither proposed Revision 13 nor the proposed rulemaking to reference this revision in 10CFR50.55a has been issued.

The NRC accepted Code Case N-516-2 subject to the following limitation in addition to the conditions specified in the Code Case:

When welding is to be performed on high neutron fluence Class 1 material, then a mockup, using material with similar fluence levels, is to be welded to verify that adequate crack prevention measures were used.

STPNOC will comply with this limitation as applicable. If alternative or additional limitations are imposed by the NRC for use of Code Case N-516-2, STPNOC will also comply with those limitations as applicable.

6. Duration of Proposed Alternative

This relief request will be implemented during the second ten-year inservice inspection interval of South Texas Project Units 1 and 2. The use of Code Case N-516-2 is requested until the NRC publishes the Code Case in a future revision of Regulatory Guide 1.147.