

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)

1.0 SCOPE

By letter dated July 29, 2010 (ADAMS Accession Number ML102240169), STP Nuclear Operating Company Energy (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 additional information is required to complete the evaluation.

2.0 REQUEST FOR ADDITIONAL INFORMATION

1. For Request for Relief RR-ENG-2-55, Part A (STP 1 and 2) regarding ASME Code, Section XI, Examination Category B-A, Items B1.11, and B1.21 "Pressure Retaining Welds in Reactor Pressure Vessel (RPV)," provide a Mercator drawing showing weld locations on the RPV.
2. For Request for Relief RR-ENG-2-55, Parts D and F (STP 1 and 2), was ASME Code Case N-509 "*Alternative Rules for the Selection and Examination of Class 1, 2, and 3 Integrally Welded Attachments,*" invoked to replace ASME Code, Examination Category B-H, Item B8.20, "Integral Attachments for Vessels," or ASME Code, Category C-C, "Integral Welded Attachments for Vessels, Piping, Pumps, and Valves," for sample selection of integral welded attachments for examination?

3. For Request for Relief RR-ENG-2-55, Part H (STP 1 and 2), ASME Code, Section XI, Examination Category R-A, Item R1.20, has the risk-informed ISI (RI-ISI) program been updated since the NRC's Safety Evaluation dated March 5, 2002 (ADAMS at ML020390041) and is the sample selection criteria based on Table 1 of ASME Code Case N-578-1 "*Risk-Informed Requirements for Class 1, 2 or 3 Piping, Method B, Division 1, Section XI?*"
4. For Request for Relief RR-ENG-2-55, Part I (STP 2) concerning ASME Code Case N-722 "*Additional Examinations for PWR Pressure Retaining Welds in Class 1 Components fabricated With Alloy 600/82/182 Materials, Section XI, Division 1,*" were visual examinations (VEs) performed prior to the volumetric examinations? If VEs were performed prior to the volumetric examinations was any leakage detected during these examinations? During the volumetric examinations were there any indications detected?
5. Regarding Request for Relief RR-ENG-2-55, Part J (STP 1), are the augmented examinations of Main Steam Extrusion-to-Flange Connections (Category BEZ, Item CIRC) based on NRC Bulletin 2004-01 dated May 28, 2004, "*Inspection of Alloy 82/182/600 Materials Used In The Fabrication Pressurizer Penetrations and Steam Space Piping Connections at Pressurized-Water Reactors?*" If so, clarify why relief is being requested since these are augmented examinations which are not required by the ASME Code or 10 CFR 50.55a. It appears that the licensee has met the recommended additional nondestructive examinations in NRC Bulletin 2004-01.