

#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## RELATED TO THE INSERVICE TESTING PROGRAM

### REQUEST FOR RELIEF FROM CERTAIN 10 CFR 50.55a REQUIREMENTS

## STP NUCLEAR OPERATING COMPANY

### SOUTH TEXAS PROJECT, UNITS 1 AND 2

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

### 1.0 INTRODUCTION

In a letter dated February 1, 1999, the STP Nuclear Operating Company (the licensee) requested the Nuclear Regulatory Commission (NRC) to authorize an alternative to the regulations pursuant to 10 CFR 50.55a(a)(3)(i) that would revise the start of its second 120-month inservice test (IST) interval for the South Texas Project, Units 1 and 2 (STP) such that the next interval for both units would begin no later than December 1, 2001. The current 120-month interval for STP would end on September 25, 2000, and October 19, 2001, for Units 1 and 2, respectively, as allowed by the ASME Boiler and Pressure Vessel Code (ASME Code), Section XI. The licensee also requested in its letter to use the requirements of the 1989 Edition of the ASME Code, Section XI to develop its second 120-month interval IST program.

### 2.0 BACKGROUND

Alternatives to Code requirements may be used by nuclear licensees when authorized by the Commission if the proposed alternatives to the requirements are such that they are shown to provide an acceptable level of quality and safety in lieu of the Code requirements [10 CFR 50.55a(a)(3)(i)], or if compliance with the Code requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety [10 CFR 50.55a(a)(3)(i)].

A licensee may also submit requests for relief from certain Code requirements when a licensee has determined that conformance with certain Code requirements is impractical for its facility [10 CFR 50.55a(g)(5)(iii)]. Pursuant to 10 CFR 50.55a(g)(6)(i), the Commission will evaluate determinations of impracticality and may grant relief and may impose alternative requirements as it determines is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest giving due consideration to the burden upon the license that could result if the requirements were imposed on the facility.



ENCLOSURE

#### 3.0 EVALUATION

The initial 120-month interval for inservice testing at STP, Units 1 and 2 began on August 25, 1988, and June 19, 1989, respectively. The 1983 Edition of the ASME Code, Section XI, subparagraph IWA-2400(c) allows the inservice inspection interval to be decreased or increased by as much as one year (12 months). It also allows, for power units that are out of service continuously for six months or more, the interval (during which the outage occurred) to be extended for a period equivalent to the outage. The South Texas Project, Unit 1 was out of service continuously from February 4, 1993, to March 22, 1994 (13½ months), and Unit 2 was out of service from February 3, 1993, to May 29, 1994 (16 months). Combining these two Code-allowed extensions (12 months plus out-of-service time) results in the second 120-month IST interval starting on September 25, 2000, for Unit 1 and October 19, 2001, for Unit 2.

The licensee has requested authorization to begin the second interval for IST no later than December 1, 2001. The extra time is needed for the development and approval of a riskinformed inservice testing (RI-IST) program. The licensee plans to submit its RI-IST program to the NRC by the summer of 2000. This would allow approximately a year for NRC staff review and approval of the RI-IST program as well as permit the licensee to utilize its resources to support a planned refueling outage in September 2001. During this extended period, the licensee will continue to test its pumps and valves to the Code requirements approved for the initial 120-month interval. The NRC staff finds that the use of the current Code of Record for IST (the 1983 Edition of the ASME Code, Section XI) provides an acceptable level of quality and safety. The licensee's proposed delay in updating its Code of Record is needed to support development of an Ri-IST program which is consistent with NRC's policy statement on pro\_abilistic risk assessment (60 FR 42622) and would not cause undue risk to the health and safety of the public as the alternative schedule would provide an acceptable level of quality and safety. Thus, the NRC staff concludes that the licensee's proposal to delay start of the second IST interval for Units 1 and 2 to no later than December 1, 2001, is authorized pursuant to 10 CFR 50.55a(a)(3)(i).

The licensee also requested that it be allowed to use the 1989 Edition of the ASME Code, Section XI, in preparing its second 120-month interval IST program for pumps and valves. The regulations in 10 CFR 50.55a(b) currently incorporate by reference the 1989 Edition of the ASME Code, Section XI. The regulations also require in 10 CFR 50.55a(f)(4)(ii) that inservice tests comply with the requirements of the latest edition and addenda of the Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The licensee stated that the next edition and/or addenda of the Code might not be incorporated by reference into 10 CFR 50.55a in time to allow the licensee to progress in an orderly manner to update its IST program and implementing procedures.

At this time, it is not known if the NRC staff will incorporate by reference the 1995 Code for Operation and Maintenance of Nuclear Power Plants (OM Code) with the 1996 Addenda into the regulations in the next amendment to 10 CFR 50.55a, as previously stated in its December 3, 1997, proposed rulemaking (62 FR 63892). The NRC staff has issued a policy paper (SECY 99-017 dated January 13, 1999) in which it has notified the Commission of its intent to revise the schedule and approach for completing the proposed amendment to 10 CFR 50.55a by eliminating the 120-month update requirement for inservice inspection and testing programs at nuclear power plants. Because of this proposed change to the regulations, it is uncertain which Code will be required for the licensee to use for its second interval IST program.

Requiring the licensee to change Codes after it has started preparing its updated IST program would cause an undue burden on the licensee. The use of the 1989 Eclition of the ASME Code, Section XI currently provides an acceptable level of safety. If the NRC staff does eventually decide to require licensees to baseline to the 1995 OM Code instead of the 1989 ASME Code, Section XI, then the licensee will be required by 10 CFR 50.55a to update its IST program to the 1995 OM Code in its third IST interval. Therefore, the staff concludes that the licensee's proposal to use the 1989 ASME Code, Section XI for its second interval IST program is authorized pursuant to 10 CFR 50.55a(a)(3)(i) as the use of the alternative Code edition would provide an acceptable level of quality and safety regardless of the outcome of the proposal to eliminate the 120-month update requirement in the final rulemaking to 10 CFR 50.55a.

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