



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

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

South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498, STN 50-499  
Change to the Bases for Technical Specification 3/4.4.9

STPNOC has revised the Bases for the South Texas Project Technical Specifications in accordance with 10CFR50.59. The changes to the Bases describe the administrative controls imposed for low temperature overpressure protection when the pressurizer power operated relief valves are not available.

The revised pages and replacement instructions are provided so that the NRC can update their copies of the Bases.

If there are any questions regarding these changes, please contact Mr. A. W. Harrison at 361-972-7298.

M. A. McBurnett  
Director, Quality & Licensing

AWH/

Attachments:

1. Page replacement instructions
2. Revised Bases Pages

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**Attachment 2**

**Revised Bases Pages**

## REACTOR COOLANT SYSTEM

### BASES

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#### LOW TEMPERATURE OVERPRESSURE PROTECTION (Continued)

overshoot beyond the PORV Setpoint which can occur as a result of time delays in signal processing and valve opening, instrument uncertainties, and single failure. To ensure that mass and head input transients more severe than those assumed cannot occur, Technical Specifications require lockout of all high head safety injection pumps while in MODE 5 and MODE 6 with the reactor vessel head on. All but one high head safety injection pump are required to be locked out in MODE 4. Technical Specifications also require lockout of the positive displacement pump and all but one charging pump while in MODES 4, 5, and 6 with the reactor vessel head installed and disallow start of an RCP if secondary temperature is more than 50°F above primary temperature. The Technical Specifications also require ECCS accumulator isolation when ECCS accumulator pressure is greater than or equal to the maximum RCS pressure for the existing RCS cold leg temperature allowed by Figures 3.4-2 and 3.4-3.

Administrative controls and two RHR relief valves will be used to provide cold overpressure protection (COMS) during the ASME stroke testing of two administratively declared inoperable PORVS. These administrative controls include the following:

- a. When RCS pressure is being maintained by the low pressure letdown control valve, the normal letdown orifices are bypassed but not isolated.
- b. Only one centrifugal charging pump (CCP) will be allowed to be operable; this minimizes the potential for a mass input overpressure transient.
- c. High Head Safety Injection (HHSI) pumps will not operate during water solid operations with the PORV(s) inoperable to minimize the potential for creating a cold overpressure transient.
- d. The RPV pressure will be controlled at the minimum value necessary to perform the required testing of the inoperable PORV(s) (325-400 psig).
- e. A Reactor Coolant Pump shall not be started with one or more of the RCS cold leg temperatures less than or equal to 350 degrees F unless the secondary side water temperature of each steam generator is less than 50 degrees F above the RCS cold leg temperature.
- f. The positive displacement pump will be demonstrated inoperable during water solid operations to minimize the potential for a mass input overpressure event, and
- g. The pressurizer heaters will be inoperable during water solid operations to minimize the potential for heat input overpressure transient until a pressurizer bubble is ready to be drawn.

During the performance of the PORV function test, two RHR trains will be OPERABLE and in operation with the auto closure interlock bypassed (or deleted) to provide COMS.

## BASES

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With one PORV inoperable, COMS will be provided during the ASME test by the OPERABLE PORV and one RHR relief valve associated with an OPERABLE and operating RHR train which has the auto closure interlock bypassed (or deleted). Each RHR relief valve provides sufficient capacity to relieve the flow resulting from the maximum charging flow with concurrent loss of letdown. Analysis conservatively demonstrates that the RHR relief valves limit RCS pressure to approximately 590 psig.

Therefore two OPERABLE and operating RHR trains or one OPERABLE PORV and one OPERABLE and operating RHR train will provide adequate and redundant overpressure protection. Use of the RHR relief valves will maintain the RCS pressure below the low temperature limits of ASME Section III, Appendix G.

With regard to the MODE 6 applicability of this Technical Specification, the statement "with the head on the reactor vessel" means any time the head is installed with or without tensioning the RPV studs.

The Maximum Allowed PORV Setpoint for the COMS will be updated based on the results of examinations of reactor vessel material irradiation surveillance specimens performed as required by 10 CFR Part 50, Appendix H.

### 3/4.4.10 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2, and 3 components ensure that the structural integrity and operational readiness of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).

Components of the Reactor Coolant System were designed to provide access to permit inservice inspections in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1974 Edition and Addenda through Winter 1975.

### 3/4.4.11 REACTOR VESSEL HEAD VENTS

Reactor vessel head vents are provided to exhaust noncondensable gases and/or steam from the Reactor Coolant System that could inhibit natural circulation core cooling. The OPERABILITY of at least two reactor vessel head vent paths ensures that the capability exists to perform this function.

The valve redundancy of the reactor vessel head vent paths serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, power supply, or control system does not prevent isolation of the vent path.

The function, capabilities, and testing requirements of the reactor vessel head vents are consistent with the requirements of Item II.B.1 of NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.