Nuclear Operating Company
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 20555-0001

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Technical Specification Bases Change

South Texas Project Technical Specification Bases pages B 3/4 7-3a, and B 3/4 8-2 are attached for your information and updating of the NRC copy of the Technical Specification Bases. These changes are enhancements to the Technical Specification Bases with information regarding:

- the ECW discharge self-cleaning strainer, and
- the emergency transformer and its associated bus

If there are any questions, please contact me at (361) 972-7136.

Scott M. Head
Manager, Licensing

mkj

Attachment: Revised Technical Specification Bases Pages B 3/4 7-3a and B 3/4 8-2

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Rec'd 03/05/02

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ATTACHMENT

REVISED BASES PAGE

B 3/4.7.4 ESSENTIAL COOLING WATER SYSTEM

The OPERABILITY of the Essential Cooling Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The ECW self-cleaning strainer must be in service and functional in order for the respective ECW train to be OPERABLE. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.

When a risk-important system or component (for example Essential Cooling Water) is taken out of service, it is important to assure that the impact on plant risk of this and other equipment simultaneously taken out of service can be assessed. The Configuration Risk Management Program evaluates the impact on plant risk of equipment out of service. A brief description of the Configuration Risk Management Program is in Section 6.8.3 (administration section) of the Technical Specification.

SURVEILLANCE REQUIREMENTS

SR 4.7.4.a

Verifying the correct alignment for manual, power operated, and automatic valves in the ECW flow path provides assurance that the proper flow paths exist for ECW operation. This SR applies to valves that assure ECW flow to required safety related equipment (to CCW heat exchangers, Standby Diesel Generators, Essential Chillers, and CCW Pump Supplemental Coolers). This SR does not apply to valves that are locked, sealed, or otherwise secured in position, since they are verified to be in the correct position prior to being locked, sealed, or secured. This SR does not require any testing or valve manipulation; rather, it involves verification that those valves capable of being mispositioned are in the correct position. This SR does not apply to valves that cannot be inadvertently misaligned, such as check valves.

The 31 day Frequency is based on engineering judgment, is consistent with the procedural controls governing valve operation, and ensures correct valve positions.

SR 4.7.4.b.1

This SR verifies proper automatic operation of the ECW valves on an actual or simulated actuation signal. The relevant signals for the surveillance are safety-injection and loss of offsite power. The ECW is a normally operating system that cannot be fully actuated as part of normal testing. This SR applies to valves that assure ECW flow to required safety related equipment (to CCW heat exchangers, Standby Diesel Generators, Essential Chillers, and CCW Pump Supplemental Coolers). This Surveillance is not required for valves that are locked, sealed, or otherwise secured in the required position under administrative controls. The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a unit outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown that these components usually pass the Surveillance when performed at the 18 month Frequency. Therefore, the Frequency is acceptable from a reliability standpoint.

A.C. SOURCES, D.C. SOURCES and ONSITE POWER DISTRIBUTION (Continued)

manually transferred to the unit's auxiliary transformer or to the standby transformers.

In the event of a loss of preferred power, the ESF electrical loads are automatically connected to the DGs in sufficient time to provide for safe reactor shutdown and to mitigate the consequences of a Design Basis Accident (DBA) such as a loss of coolant accident (LOCA).

Ratings for Train A, Train B and Train C DGs satisfy the requirements of Regulatory Guide 1.108. The continuous service rating of each DG is 5500 kW with 10% overload permissible for up to 2 hours in any 24 hour period.

Refer to UFSAR Chapter 8 for a more complete description.

APPLICABLE SAFETY ANALYSES

The initial conditions of DBA and transient analyses in the FSAR, Chapter 6 and Chapter 15, assume ESF systems are OPERABLE. The AC electrical power sources are designed to provide sufficient capacity, capability, redundancy, and reliability to ensure the availability of necessary power to ESF systems so that the fuel, Reactor Coolant System (RCS), and containment design limits are not exceeded.

The OPERABILITY of the AC electrical power sources is consistent with the initial assumptions of the Accident analyses and is based upon meeting the design basis of the unit. In Modes 1, 2, 3, and 4 this results in maintaining at least two trains of the onsite or one train of the offsite AC sources OPERABLE during Accident conditions in the event of:

a. An assumed loss of all offsite power or all onsite AC power; and
b. A worst case single failure.

The AC sources satisfy Criterion 3 of NRC Policy Statement.

A single train onsite AC source can effectively mitigate all but the most severe events with operator action in some cases. The events that cannot be mitigated by a single train onsite AC source are highly unlikely. When a risk-important system or component (for example a Standby Diesel Generator) is taken out of service, it is important to assure that the impact on plant risk of this and other equipment simultaneously taken out of service can be assessed. The Configuration Risk Management Program evaluates the impact on plant risk of equipment out of service. A brief description of the Configuration Risk Management Program is in Section 6.8.3 (administration section) of the Technical Specification.

LCO

Two qualified circuits between the offsite transmission network and the onsite Class 1E Electrical Power System and separate and independent DGs for each train ensure availability of the required power to shut down the reactor and maintain in a safe shutdown condition after an anticipated operational occurrence (AOO) or a postulated DBA.

The 138 kV emergency transformer and its associated 13.8 kV bus cannot be used as a source of offsite power for meeting an LCO in any Mode of operation. The 138 kV line from Blessing that feeds the emergency transformer physically crosses under several 345 kV transmission lines and thus fails the independence test for an offsite power source.

Qualified offsite circuits are those that are described in the FSAR and are part of the licensing basis for the unit.