Enclosure 1 to TXX-95306

BASES

FOR

TECHNICAL SPECIFICATION SECTION 2.2.1

REACTOR TRIP SYSTEM INSTRUMENTATION SETPOINTS

UNDERVOLTAGE AND UNDERFREQUENCY - REACTOR COOLANT PUMP BUSSES

CPSES - TECHNICAL SPECIFICATIONS

AMENDMENT - 42

DETAILED DESCRIPTION

Prefix Page (as amended)	Group	Description
B 2 - 8	2	Delete unnecessary details from Technical Specification Bases (2.2.1) regarding time delay requirements for the Undervoltage and Underfrequency Reactor Coolant Pump trip setpoints.

Revision

Technical Specification Bases 2.2.1 describes the undervoltage and underfrequency reactor coolant pump trip requrements. The specific statements regarding the response time for the RCP undervoltage (1.2 seconds) and the underfrequency (0.3 second) is deleted from the Technical Specification Bases 2.2.1. The statements regarding the "1.2" and "0.3" seconds were part of the Westinghouse Standard Technical Specifications (NRC letter to CPSES dated 8/14/87). The specific time intervals discussed in these statements are not explicitly used in the accident analyses of FSAR Chapter 15 or the Reactor Trip System instrumentation Response Times in TRM Table 1.1.1. The requirements for undervoltage and underfrequency response times exist and belong in Technical Requirements Manual Table 1.1.1.

Change Request Number TS - 95 - 7 . 1

Related SER : 16 SSER : 22

SER/SSER Impact

Undervoltage and Underfrequency - Reactor Coolant Pump Busses

The Undervoltage and Underfrequency Reactor Coolant Pump Bus trips provide core protection against DNB as a result of complete loss of forced coolant flow. The specified setpoints assure a Reactor trip signal is generated before the Low Flow Trip Setpoint is reached. Time delays are incorporated in the Underfrequency and Undervoltage trips to prevent spurious Reactor trips from momentary electrical power transients. ~~For undervoltage, the delay is set so that the time required for a signal to reach the Reactor trip breakers following the simultaneous trip of two or more reactor coolant pump bus circuit breakers shall not exceed 1.2 seconds. For underfrequency, the delay is set so that the time required for a signal to reach the Reactor trip breakers after the Underfrequency Trip Setpoint is reached shall not exceed 0.3 second.~~ On decreasing power the Undervoltage and Underfrequency Reactor Coolant Pump Bus trips are automatically blocked by P-7 (a power level of approximately 10% of RATED THERMAL POWER with a turbine first stage chamber pressure at approximately 10% of full power equivalent); and on increasing power, reinstated automatically by P-7.

Turbine Trip

A Turbine trip initiates a Reactor trip. On decreasing power the Reactor trip from the Turbine trip is automatically blocked by P-9 (a power level of approximately 50% of RATED THERMAL POWER); and on increasing power, reinstated automatically by P-9.

Safety Injection Input from ESF

If a Reactor trip has not already been generated by the Reactor Trip System instrumentation, the ESF automatic actuation logic channels will initiate a Reactor trip upon any signal which initiates a Safety Injection. The ESF instrumentation channels which initiate a Safety Injection signal are shown in Table 3.3-2.