TABLE 4.3-1 (Continued)

REACTOR PROTECTIVE INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
12. Reactor Trip Breakers	N.A.	N.A.	S/U(1),M,R(6)	1, 2, 3*, 4*, 5*
13. Wide Range Logarithmic Neutron Flux Monitor	S	R	S/U(1)	1, 2, 3, 4, 5
14. Reactor Coolant Flow-Low	S	R	M	1, 2
15. Loss of Load (Turbine Hydraulic Fluid Pressure - Low)	S	N.A.	M	1

TABLE 4.3-1 (Continued)

TABLE NOTATION

* - Only if the reactor trip breakers are in the closed position and the CEA drive system is capable of CEA withdrawal.

(1) - Each startup or when required with the reactor trip breakers closed and the CEA drive system capable of rod withdrawal, if not performed in the previous 7 days.

(2) - Heat balance only (CHANNEL FUNCTIONAL TEST not included), above 15% of RATED THERMAL POWER; adjust "Nuclear Power Calibrate" potentiometer to null "Nuclear Power - ΔT Power". During PHYSICS TESTS, these daily calibrations may be suspended provided these calibrations are performed upon reaching each major test power plateau and prior to proceeding to the next major test power plateau.

(3) - Above 15% of RATED THERMAL POWER, recalibrate the excore detectors which monitor the AXIAL SHAPE INDEX by using the incore detectors or restrict THERMAL POWER during subsequent operations to $\leq$ 90% of the maximum allowed THERMAL POWER level with the existing reactor coolant pump combination.

(4) - Neutron detectors may be excluded from CHANNEL CALIBRATION.

(5) - Adjust "ΔT Pwr Calibrate" potentiometers to make ΔT power signals agree with calorimetric calculation.

(6) - At least once per 18 months and following maintenance or adjustment of the reactor trip breakers, the CHANNEL FUNCTIONAL TEST shall include verification of the independent OPERABILITY of the undervoltage and shunt trips.

(7) - (deleted)

(8) - The fuse circuitry in the matrix fault protection circuitry shall be determined to be OPERABLE by testing with the installed test circuitry.

3/4 7-12 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

LIMITING CONDITION FOR OPERATION

3.7.2 The temperature of the secondary coolant in the steam generators shall be greater than 100°F when the pressure of the secondary coolant in the steam generator is greater than 275 psig.

APPLICABILITY: At all times.

ACTION:

With the requirements of the above specification not satisfied:

a. Reduce the steam generator pressure to less than or equal to 275 psig within 30 minutes, and

b. Perform an engineering evaluation to determine the effect of the overpressurization on the structural integrity of the steam generator. Determine that the steam generator remains acceptable for continued operation prior to increasing its temperatures above 200°F.

SURVEILLANCE REQUIREMENTS

4.7.2 The pressure of the secondary side of the steam generators shall be determined to be less than 275 psig at least once per hour when the temperature of secondary coolant is less than 100°F.

SAFETY EVALUATION

Limiting Condition for Operation 3.7.2 for Technical Specification 3/4.7.2 requires that the temperatures of both primary and secondary coolants in the steam generators shall be greater than 100°F when the pressure of either coolant in the steam generator is greater than 275 psig. Our startup procedures call for initial heating of the primary coolant to be performed utilizing pump heat from the reactor coolant pumps (RCP). However, the pump curve received from the vendor indicates that operation of the RCPs within these primary coolant system pressure limits will cause reduction in life of the RCP seals. Since the temperature of the secondary coolant in the steam generator is at ambient, about 80 to 90°F, this Technical Specification would preclude the use of RCPs to heat up the primary coolant without reducing seal life.

The bases for this Technical Specification is that by placing limits on the pressure and temperature of both the primary and secondary coolants, the pressure induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits. The current limits are based on a steam generator RT_{NDT} of 30°F.

However, Technical Specification 3/4.4.9 also contains pressure and temperature limitations for the reactor coolant system (RCS). The bases for these limits is the same as that for Technical Specification 3/4.7.2, i.e., to ensure that the maximum pressure induced stresses do not exceed the maximum allowable fracture toughness stress imits for the RCS pressure retaining components. Bases 3/4.4.9 states that these curves were developed assuming the maximum RT_{NDT} for all RCS pressure-retaining materials, with the exception of the reactor pressure vessel, of 50°F.

Therefore, the pressure/temperature curves for Technical Specification 3/4.4.9 are appropriate for use for the primary coolant in the steam generator as well, since they are based on a more conservative basis (higher RT_{NDT}) than those in Technical Specification 3/4.7.2.

The pressure temperature limits in Technical Specification 3/4.7.2 are clearly more conservative and restrictive than required. Due to the potential problems of the RCP seals being operated at the low pressure currently required, the existing limits of 3/4.7.2 may cause the system to be operated in a condition less safe than desired.

Based on the above, it is our determination that removal of the pressure temperature limits for the primary coolant from Technical Specification 3/4.7.2 does not pose a risk to health and safety of the public. This is due to the fact that the secondary pressure boundary remains protected by this Technical Specification and that the primary pressure boundary is protected by Technical Specification 3/4.4.9.

Our NSSS vendor concurs with this conclusion.

STATE OF FLORIDA)
) ss.
COUNTY OF PALM BEACH)

Robert E. Uhrig, being first duly sworn, deposes and says:

That he is Vice President of Florida Power & Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

Robert E. Uhrig

Subscribed and sworn to before me this
30 day of April, 1983.

Cheryl L. Fredrick

NOTARY PUBLIC, in and for the County of Palm Beach, State of Florida.

My commission expires: Notary Public, State of Florida at Large My Commission Expires October 30, 1983 Bonded thru Maynard Bonding Agency