November 22, 1989

REVISED

11

POWER DISTRIBUTION LIMITS

LIMITING CONDITION FOR OPERATION

3.2.2.2 $F_0(Z)$ shall be limited by the following relationships:

 $F_Q(Z) \leq \frac{2.32}{5}$ [K(Z)] for P > 0.5

 $F_0(2) \le [4.64] [K(2)]$ for P < 0.5

Where P = THERMAL POWER, and RATED THERMAL POWER, and

K(Z) = the function obtained from Figure 3.2-2 for a given core height location.

APPLICADILITY: MODE 1 (Unit 2 Cycle 3).

ACTION:

With $F_0(Z)$ exceeding its limit:

- a. Reduce THERMAL POWER at least 1% for each 1% $F_Q(Z)$ exceeds the limit within 15 minutes and similarly reduce the Power Range Neutron Flux-High Trip Setpoints within the next 4 hours; POWER OPERATION may proceed for up to a total of 72 hours; subsequent POWER OPERATION may proceed provided the Overpower ΔT Trip Setpoints have been reduced at least 1% for each 1% $F_Q(Z)$ exceeds the limit. The Overpower ΔT Trip Setpoint reduction shall be performed with the reactor in at least HOT STANDBY.
- b. Identify and correct the cause of the out-of-limit condition prior to increasing THERMAL POWER above the reduced limit required by ACTION a., above; THERMAL POWER may then be increased provided $F_Q(Z)$ is demonstrated through incore mapping to be within its limit.

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POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS (Continued)

- b) Comply with the requirements of Specification 3.2.2.1 for $F_0(z)$ exceeding its limit by the percent calculated.
- g. The limits specified in Specification 4.2.2.1.2.c, 4.2.2.1.2.e, and 4.2.2.1.2.f above are not applicable in the following core plane regions:
 - 1. Lower core region from 0 to 15%, inclusive.
 - 2. Upper core region from 85 to 100%, inclusive.

4.2.2.1.3 When $F_Q(Z)$ is measured pursuant to Specification 4.10.2.2, an overall measured $F_Q(Z)$ shall be obtained from power distribution map and increased by 3% to account for manufacturing tolerances and further increased by 5% to account for measurement uncertainty.

POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS

- 4.2.2.2.1 The provisions of Specification 4.0.4 are not applicable.
- 4.2.2.2.2 F_{xy} -nall be evaluated to determine if $F_0(Z)$ is within its limit by:
 - a. Using the movable incore detectors to obtain a power distribution map at any THERMAL POWER greater than 5% of RATED THERMAL POWER.
 - Increasing the measured F_{XY} component of the power distribution map by 3% to account for manufacturing tolerances and further increasing the value by 5% to account for measurement uncertainties,
 - c. Comparing the F_{xy} computed (F_{xy}^{C}) obtained in Specification 4.2.2.2.2b., above, to:
 - 1. The F_{xy} limits for RATED THERMAL POWER (F_{xy}^{RTP}) for the appropriate measured core planes given in Specification 4.2.2.2.2e. and f. below, and
 - 2. The relationship:

 $F_{xy}^{L} = (F_{xy}^{RTP})$ [1+0.2(1-P)],

where F_{xy} is the limit for fractional THERMAL POWER operation expressed as a function of F_{xy}^{RTP} and P is the fraction of RATED THERMAL POWER at which F_{xy} was measured.

d. Remeasuring F_{xy} according to the following schedule:

- 1. When F_{xy}^{C} is greater than the F_{xy}^{RTP} limit for the appropriate measured core plane but less than the F_{xy}^{L} relationship, additional power distribution maps shall be taken and F_{xy}^{C} compared to F_{xy}^{RTP} and F_{xy}^{L} either:
 - a) Within 24 hours after exceeding by 20% of RATED THERMAL POWER or greater, the THERMAL POWER at which F_{xy}^{C} was last determined, or
 - b) A: least once per 31 EFPD, whichever occurs first.

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POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS (Continued)

2. When the F_{xy}^{C} is less than or equal to the (F_{xy}^{RTP}) limit for the appropriate measured core plane, additional power

distribution maps shall be taken and F_{xy}^{C} compared to F_{xy}^{RTP} and F_{xy}^{L} at least once per 31 EFPD.

- e. The F_{xy} limit for RATED THERMAL POWER (F_{xy}^{RTP}) shall be provided for all core planes containing Bank "D" control rods and all unrodded core planes in the CORE OPERATING LIMITS REPORT per Specification 6.9.1.8.
- f. The F_{xy} limits of Specification 4.2.2.2.2e., above, are not applicable in the following core plane regions as measured in percent of core height from the bottom of the fuel:
 - 1. Lower core region from 0 to 15%, inclusive,
 - 2. Upper core region from 85 to 100% inclusive,
 - 3. Grid plane regions at 17.8 ± 2%, 32.1 ± 2%, 46.4 ± 2%, 60.6 ± 2% and 74.9 ± 2%, inclusive, and
 - Core plane regions within ± 2% of core height (± 2.88 inches) about the bank demand position of the Bank "D" control rods.
- g. With F_{xy}^{C} exceeding F_{xy}^{L} , the effects of F_{y} on $F_{Q}(Z)$ shall be evaluated to determine if $FQ^{(Z)}$ is within its limits.

4.2.2.2.3 When $F_Q(Z)$ is measured pursuant to Specification 4.10.2.2, an overall measured $F_Q(Z)$ shall be obtained from power distribution map and increased by 3% to account for manufacturing tolerances and further increased by 5% to account for measurement uncertainty.