ATTACHMENT 3 to TXX-94242

AFFECTED TECHNICAL SPECIFICATION PAGES
(NUREG-1468)

(Pages 3/4 2-5, 3/4 2-6, 6-20 & 6-21)

POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS

4.2.2.1 The provisions of Specification 4.0.4 are not applicable.

4.2.2.2. $F_Q(Z)$ shall be evaluated to determine if it 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.

b. Determining the computed heat flux hot channel factor, $F_Q^C(Z)$, as follows:

Increase the measured $F_Q(Z)$ obtained from the power distribution map by 3% to account for manufacturing tolerances and further increase the value by 5% to account for measurement uncertainties.

c. Verifying that $F_Q^C(Z)$, obtained in Specification 4.2.2.2b. above, satisfies the relationship in Specification 3.2.2.

d. The $F_Q^C(Z)$ obtained in 4.2.2.2b above shall satisfy the following relationship at the time of the target flux determination:

$$F_Q^C(Z) \leq \frac{F_Q^{RTP} \times K(Z)}{P \times W(Z)} \quad \text{for } P > 0.5$$

$$F_Q^C(Z) \leq \frac{F_Q^{RTP} \times K(Z)}{0.5 \times W(Z)} \quad \text{for } P \leq 0.5$$

where $F_Q^C(Z)$ is obtained in Specification 4.2.2.2b. above, F_Q^{RTP} is the F_Q limit, K(Z) is the normalized $F_Q(Z)$ as a function of core height, P is the fraction of RATED THERMAL POWER, and W(Z) is the cycle dependent function that accounts for power distribution transients encountered during normal operation. F_Q^{RTP}, K(Z) and W(Z) are specified in the CORE OPERATING LIMITS REPORT as per Specification 6.9.1.6.

e. Measuring $F_Q(Z)$ according to the following schedule:

1. Upon achieving equilibrium condition after exceeding by 20% or more of RATED THERMAL POWER, the THERMAL POWER at which $F_Q(Z)$ was last determined*, or
2. At least once per 31 Effective Full Power Days, whichever occurs first.

*Power level may be increased until the THERMAL POWER for extended operation has been achieved.

POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS (Continued)

f. With measurements indicating

$$\text{maximum over } Z \left| \frac{F_Q^C(Z)}{K(Z)} \right|$$

has increased since the previous determination of $F_Q^C(Z)$ either of the following actions shall be taken:

an allowance ~~2%~~ as specified in the COLR

1) Increase $F_Q^C(Z)$ by ~~2%~~ and verify that this value satisfies the relationship in Specification 4.2.2.2d, or

2) $F_Q^C(Z)$ shall be measured at least once per 7 Effective Full Power Days until two successive maps indicate that

$$\text{maximum over } Z \left| \frac{F_Q^C(Z)}{K(Z)} \right|$$ is not increasing.

g. With the relationships specified in Specification 4.2.2.2d above not being satisfied:

1) Calculate the percent that $F_Q(Z)$ exceeds its limits by the following expression:

$$\left\{ \left(\text{maximum over } Z \left[\frac{F_Q^C(Z) \times W(Z)}{\frac{F_Q^{RTP}}{P} \times K(Z)} \right] \right) - 1 \right\} \times 100 \text{ for } P > 0.5$$

$$\left\{ \left(\text{maximum over } Z \left[\frac{F_Q^C(Z) \times W(Z)}{\frac{F_Q^{RTP}}{0.5} \times K(Z)} \right] \right) - 1 \right\} \times 100 \text{ for } P \leq 0.5, \text{ and}$$

2) The following action shall be taken:

Within 15 minutes, control the AFD to within new AFD limits which are determined by reducing the AFD limits specified in the CORE OPERATING LIMITS REPORT by 1% AFD for each percent $F_Q(Z)$ exceeds its limits as determined in Specification 4.2.2.2g.1. Within 8 hours, reset the AFD alarm setpoints to these modified limits.

ADMINISTRATIVE CONTROLS

MONTHLY OPERATING REPORTS (Continued)

shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office of the NRC, no later than the 15th of each month following the calendar month covered by the report.

CORE OPERATING LIMITS REPORT

6.9.1.6a Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT (COLR) before each reload cycle or any remaining part of a reload cycle for the following:

1). Moderator temperature coefficient BOL and EOL limits and 300 ppm surveillance limit for Specification 3/4.1.1.3,

2). Shutdown Rod Insertion Limit for Specification 3/4.1.3.5,

3). Control Rod Insertion Limits for Specification 3/4.1.3.6,

4). AXIAL FLUX DIFFERENCE Limits and target band for Specification 3/4.2.1,

and the $F_Q^C(Z)$ allowances

5). Heat Flux Hot Channel Factor, K(Z), W(Z), and F_Q^{RTP} for Specification 3/4.2.2,

6). Nuclear Enthalpy Rise Hot Channel Factor Limit and the Power Factor Multiplier for Specification 3/4.2.3.

6.9.1.6b The following analytical methods used to determine the core operating limits are for Units 1 and 2, unless otherwise stated, and shall be those previously approved by the NRC in:

1). WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY," July 1985 (W Proprietary). (Methodology for Specifications 3.1.1.3 - Moderator Temperature Coefficient, 3.1.3.5 - Shutdown Bank Insertion Limit, 3.1.3.6 - Control Bank Insertion Limits, 3.2.1 - Axial Flux Difference, 3.2.2 - Heat Flux Hot Channel Factor, and 3.2.3 - Nuclear Enthalpy Rise Hot Channel Factor.)

2). WCAP-8385, "POWER DISTRIBUTION CONTROL AND LOAD FOLLOWING PROCEDURES - TOPICAL REPORT," September 1974 (W Proprietary). (Methodology for Specification 3.2.1 - Axial Flux Difference [Constant Axial Offset Control].)

3). T. M. Anderson to K. Kniel (Chief of Core Performance Branch, NRC January 31, 1980--Attachment: Operation and Safety Analysis Aspects of an Improved Load Follow Package. (Methodology for Specification 3.2.1 - Axial Flux Difference [Constant Axial Offset Control].)

4). NUREG-0800, Standard Review Plan, U.S. Nuclear Regulatory Commission, Section 4.3, Nuclear Design, July 1981. Branch Technical Position CPB 4,3-1, Westinghouse Constant Axial Offset Control (CAOC), Rev. 2, July 1981. (Methodology for Specification 3.2.1 - Axial Flux Difference [Constant Axial Offset Control].)

ADMINISTRATIVE CONTROLS

CORE OPERATING LIMITS REPORT (Continued)

February 1994

5). WCAP-10216-P-A, "RELAXATION OF CONSTANT AXIAL OFFSET CONTROL F_Q SURVEILLANCE TECHNICAL SPECIFICATION," ~~June 1983~~ (W Proprietary). (Methodology for Specification 3.2.2 - Heat Flux Hot Channel Factor (W(z) surveillance requirements for F_Q Methodology).)

Revision 1A

6). WCAP-10079-P-A, "NOTRUMP, A NODAL TRANSIENT SMALL BREAK AND GENERAL NETWORK CODE," August 1985, (W Proprietary).

7). WCAP-10054-P-A, "WESTINGHOUSE SMALL BREAK ECCS EVALUATION MODEL USING THE NOTRUMP CODE", August 1985, W Proprietary).

8). WCAP-11145-P-A, "WESTINGHOUSE SMALL BREAK LOCA ECCS EVALUATION MODEL GENERIC STUDY WITH THE NOTRUMP CODE", October 1986, W Proprietary).

9). RXE-90-006-P, "Power Distribution Control Analysis and Overtemperature N-16 and Overpower N-16 Trip Setpoint Methodology," February 1991. (Methodology for Specification 3.2.1 - Axial Flux Difference, 3.2.2 - Heat Flux Hot Channel Factor.)

10). RXE-88-102-P, "TUE-1 Departure from Nucleate Boiling Correlation", January 1989.

11). RXE-88-102-P, Sup. 1, "TUE-1 DNB Correlation - Supplement 1", December 1990.

12). RXE-89-002, "VIPRE-01 Core Thermal-Hydraulic Analysis Methods for Comanche Peak Steam Electric Station Licensing Applications", June 1989.

13). RXE-91-001, "Transient Analysis Methods for Comanche Peak Steam Electric Station Licensing Applications", February 1991.

14). RXE-91-002, "Reactivity Anomaly Events Methodology", May 1991. (Methodology for Specification 3.1.1.3 - Moderator Temperature Coefficient, 3.1.3.5 - Shutdown Bank Insertion Limit, 3.1.3.6 - Control Bank Insertion Limits, 3.2.1 - Axial Flux Difference, 3.2.2 - Heat Flux Hot Channel Factor, 3.2.3 - Nuclear Enthalpy Rise Hot Channel Factor.)

15). RXE-90-007, "Large Break Loss of Coolant Accident Analysis Methodology", December 1990.

16). TXX-88306, "Steam Generator Tube Rupture Analysis", March 15, 1988.

17). RXE-91-005, "Methodology for Reactor Core Response to Steamline Break Events," May, 1991.