

March 1, 1995

Mr. C. Lance Terry  
Group Vice President, Nuclear  
TU Electric  
Energy Plaza  
1601 Bryan Street, 12th Floor  
Dallas, Texas 75201-3411

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2 - AMENDMENT  
NOS. 34 AND 20 TO FACILITY OPERATING LICENSE NOS. NPF-87 AND NPF-89  
(TAC NOS. M90872 AND M90873)

Dear Mr. Terry:

The Commission has issued the enclosed Amendment Nos. 34 and 20 to Facility Operating License Nos. NPF-87 and NPF-89 for the Comanche Peak Steam Electric Station, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated November 18, 1994.

These amendments change Technical Specification 3/4.2.2, "HEAT FLUX HOT CHANNEL FACTOR -  $F_q(Z)$ " and 6.9.1.6a, "CORE OPERATING LIMITS REPORT" to implement the revised methodology for calculating the penalty to  $F_q(z)$ . This methodology is documented in Revision 1A, to Westinghouse Topical Report WCAP-10216-P-A, "Relaxation of Constant Axial Offset Control -  $F_q$  Surveillance Technical Specification," and was approved by the NRC in a letter dated November 26, 1993.

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY:

Timothy J. Polich, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

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PDR ADOCK 05000445  
PDR

Docket Nos. 50-445  
and 50-446

Enclosures: 1. Amendment No. 34 to NPF-87  
2. Amendment No. 20 to NPF-89  
3. Safety Evaluation

cc w/encls: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

March 1, 1995

Mr. C. Lance Terry  
Group Vice President, Nuclear  
TU Electric  
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1601 Bryan Street, 12th Floor  
Dallas, Texas 75201-3411

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2 - AMENDMENT  
NOS. 34 AND 20 TO FACILITY OPERATING LICENSE NOS. NPF-87 AND NPF-89  
(TAC NOS. M90950 AND M90951)

Dear Mr. Terry:

The Commission has issued the enclosed Amendment Nos. 34 and 20 to Facility Operating License Nos. NPF-87 and NPF-89 for the Comanche Peak Steam Electric Station, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated November 18, 1994.

These amendments change Technical Specifications 3/4.2.2, "HEAT FLUX HOT CHANNEL FACTOR -  $F_0(Z)$ " and 6.9.1.6a, "CORE OPERATING LIMITS REPORT" to implement the revised methodology for calculating the penalty to  $F_0(z)$ . This methodology is documented in Revision 1A, to Westinghouse Topical Report WCAP-10216-P-A, "Relaxation of Constant Axial Offset Control -  $F_0$  Surveillance Technical Specification," and was approved by the NRC in a letter dated November 26, 1993.

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script, reading "Timothy J. Polich", is written above the typed name.

Timothy J. Polich, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-445  
and 50-446

Enclosures: 1. Amendment No. 34 to NPF-87  
2. Amendment No. 20 to NPF-89  
3. Safety Evaluation

cc w/encls: See next page

Mr. C. Lance Terry  
TU Electric Company

cc:  
Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
P. O. Box 1029  
Granbury, Texas 76048

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011

Mrs. Juanita Ellis, President  
Citizens Association for Sound Energy  
1426 South Polk  
Dallas, Texas 75224

Mr. Roger D. Walker, Manager  
Regulatory Affairs for Nuclear  
Engineering Organization  
Texas Utilities Electric Company  
1601 Bryan Street, 12th Floor  
Dallas, Texas 75201-3411

Texas Utilities Electric Company  
c/o Bethesda Licensing  
3 Metro Center, Suite 610  
Bethesda, Maryland 20814

William A. Burchette, Esq.  
Counsel for Tex-La Electric  
Cooperative of Texas  
Jorden, Schulte, & Burchette  
1025 Thomas Jefferson Street, N.W.  
Washington, D.C. 20007

GDS Associates, Inc.  
Suite 720  
1850 Parkway Place  
Marietta, Georgia 30067-8237

Jack R. Newman, Esq.  
Newman, Bouknight, & Edgar, P.C.  
1615 L Street, N.W.  
Suite 1000  
Washington, D.C. 20036

Comanche Peak, Units 1 and 2

Chief, Texas Bureau of Radiation  
Control  
Texas Department of Health  
1100 West 49th Street  
Austin, Texas 78756

Honorable Dale McPherson  
County Judge  
P. O. Box 851  
Glen Rose, Texas 76043

Office of the Governor  
ATTN: Susan Rieff, Director  
Environmental Policy  
P. O. Box 12428  
Austin, Texas 78711



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

TEXAS UTILITIES ELECTRIC COMPANY  
COMANCHE PEAK STEAM ELECTRIC STATION, UNIT 1  
DOCKET NO. 50-445  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 34  
License No. NPF-87

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Texas Utilities Electric Company (TU Electric, the licensee) dated November 18, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-87 is hereby amended to read as follows:

2. Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 34, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Timothy J. Polich, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment: Changes to the  
Technical Specifications

Date of Issuance: March 1, 1995



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

TEXAS UTILITIES ELECTRIC COMPANY  
COMANCHE PEAK STEAM ELECTRIC STATION, UNIT 2  
DOCKET NO. 50-446  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 20  
License No. NPF-89

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Texas Utilities Electric Company (TU Electric, the licensee) dated November 18, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-89 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 20, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. TU Electric shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Timothy J. Polich, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment: Changes to the  
Technical Specifications

Date of Issuance: March 1, 1995

ATTACHMENT TO LICENSE AMENDMENT NOS. 34 AND 20

FACILITY OPERATING LICENSE NOS. NPF-87 AND NPF-89

DOCKET NOS. 50-445 AND 50-446

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contains marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE

3/4 2-6  
3/4 6-20  
3/4 6-21

INSERT

3/4 2-6  
3/4 6-20  
3/4 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.  $F_0(Z)$  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,  $F_0^C(Z)$ , as follows:  
Increase the measured  $F_0(Z)$  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  $F_0^C(Z)$ , obtained in Specification 4.2.2.2b. above, satisfies the relationship in Specification 3.2.2.
- d. The  $F_0^C(Z)$  obtained in 4.2.2.2b above shall satisfy the following relationship at the time of the target flux determination:

$$F_0^C(Z) \leq \frac{F_0^{RTP} \times K(Z)}{P \times W(Z)} \quad \text{for } P > 0.5$$

$$F_0^C(Z) \leq \frac{F_0^{RTP} \times K(Z)}{0.5 \times W(Z)} \quad \text{for } P \leq 0.5$$

where  $F_0^C(Z)$  is obtained in Specification 4.2.2.2b. above,  $F_0^{RTP}$  is the  $F_0$  limit,  $K(Z)$  is the normalized  $F_0(Z)$  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.  $F_0^{RTP}$ ,  $K(Z)$  and  $W(Z)$  are specified in the CORE OPERATING LIMITS REPORT as per Specification 6.9.1.6.

- e. Measuring  $F_0(Z)$  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  $F_0(Z)$  was last determined\*, or
  2. At least once per 31 Effective Full Power Days, whichever occurs first.

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\*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

$$\text{maximum } \left( \frac{F_q^c(Z)}{K(Z)} \right) \text{ over } Z$$

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

- 1) Increase  $F_q^c(Z)$  by an allowance  $\geq 2\%$  as specified in the COLR 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

$$\text{maximum } \left( \frac{F_q^c(Z)}{K(Z)} \right) \text{ is not increasing. over } Z$$

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:

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

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

- 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

### ANNUAL REPORTS (Continued)

- b. The results of specific activity analyses in which the primary coolant exceeded the limits of Specification 3.4.7. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded (in graphic and tabular format); (2) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Clean-up flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I-131 concentration ( $\mu\text{Ci/gm}$ ) and one other radioiodine isotope concentration ( $\mu\text{Ci/gm}$ ) as a function of time for the duration of the specific activity above the steady-state level; and (5) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

### ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT\*

6.9.1.3 The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM, and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR 50.

### ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT\*\*

6.9.1.4 The Annual Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR 50.

### MONTHLY OPERATING REPORTS

6.9.1.5 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or safety valves,

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\*A single submittal may be made for a multiple unit station.

\*\*A single submittal may be made for a multi-unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

## 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.,
- 5). Heat Flux Hot Channel Factor,  $K(Z)$ ,  $W(Z)$ ,  $F_q^{RTP}$ , and the  $F_q^C(Z)$  allowances 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)

- 5). WCAP-10216-P-A, Revision 1A, "RELAXATION OF CONSTANT AXIAL OFFSET CONTROL  $F_q$  SURVEILLANCE TECHNICAL SPECIFICATION," February 1994 (W Proprietary). (Methodology for Specification 3.2.2 - Heat Flux Hot Channel Factor ( $W(z)$  surveillance requirements for  $F_q$  Methodology).)
- 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.

## ADMINISTRATIVE CONTROLS

### CORE OPERATING LIMITS REPORT (Continued)

Reference 18) is for Unit 2 only:

- 18). WCAP-9220-P-A, Rev. 1, "WESTINGHOUSE ECCS EVALUATION MODEL- 1981 Version", February 1982 (W Proprietary).

6.9.1.6c The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as SHUTDOWN MARGIN, and transient and accident analysis limits) of the safety analysis are met.

6.9.1.6d The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 34 AND 20 TO  
FACILITY OPERATING LICENSE NOS. NPF-87 AND NPF-89  
TEXAS UTILITIES ELECTRIC COMPANY  
COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2  
DOCKET NOS. 50-445 AND 50-446

1.0 INTRODUCTION

By application dated November 18, 1994, Texas Utilities Electric Company (TU Electric/the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License Nos. NPF-87 and NPF-89) for the Comanche Peak Steam Electric Station (CPSES), Units 1 and 2. The proposed changes would revise Technical Specifications (TS) 3/4.2.2, "HEAT FLUX HOT CHANNEL FACTOR -  $F_q(z)$ " and 6.9.1.6, "CORE OPERATING LIMITS REPORT" as follows:

- (1) TS Surveillance Requirement 4.2.2.2f would be revised to replace the standard 2 percent allowance, which accounts for increases in  $F_q^c(z)$  between surveillances, with cycle-specific allowances in the Core Operating Limits Report (COLR).
- (2) TS 6.9.1.6a, item 5 would be revised to add the cycle-specific allowance which is added to  $F_q^c(z)$  when  $F_q^c(z)$  is increasing.
- (3) TS 6.9.1.6b, item 5 would be revised to update the reference to the NRC approved methodology provided in Westinghouse Topical Report WCAP-10216-P-A, Revision 1A, "Relaxation of Constant Axial Offset Control -  $F_q$  Surveillance Technical Specification."

2.0 BACKGROUND

Technical Specification Surveillance Requirement 4.2.2.2e requires that the Heat Flux Hot Channel Factor -  $F_q(z)$  be measured every 31 effective full power days (EFPD). A computed Heat Flux Hot Channel Factor -  $F_q^c(z)$  is determined by increasing the measured  $F_q(z)$  to account for manufacturing tolerances and measurement uncertainties.  $F_q^c(z)$  is used to ensure that  $F_q(z)$  does not exceed its limit. If  $F_q^c(z)$  has increased from the previous surveillance, Surveillance Requirement 4.2.2.2f requires that either a 2 percent allowance be added to  $F_q^c(z)$  and that the increased value of  $F_q^c(z)$  remains within the limits specified by Specification 4.2.2.2d, or the surveillance frequency must be increased to every 7 EFPD.

Currently, Technical Specification 4.2.2.2f uses a standard 2 percent allowance because it has historically bounded the maximum potential monthly increase in  $F_a^c(z)$  for typical cores. However, for more recent core designs, between monthly surveillances,  $F_a^c(z)$  may increase beyond the 2 percent allowance provided. For those cores, a larger allowance should be specified on a cycle-specific basis.

A generic analysis of  $F_a(z)$  increases was submitted to the NRC by Westinghouse Topical Report WCAP-10216-P-A, Revision 1A. The NRC reviewed the report and found it to be acceptable for referencing in licensing applications by letter dated November 26, 1993.

Westinghouse informed the licensee that the Unit 2, Cycle 2 reload could have increases in  $F_a^c(z)$  which exceed 2 percent per month during some portion of the cycle. Therefore, in order that the CPSES TSs use the appropriate cycle-specific allowance factors, the proposed changes to Surveillance Requirement 4.2.2.2f and the administrative controls TS 6.9.1.6a, item 5 and TS 6.9.1.6b, item 5 were submitted for approval.

### 3.0 EVALUATION

$F_a^c(z)$  is determined during periodic flux maps and compared to the  $F_a^c(z)$  limit to ensure that  $F_a(z)$  does not exceed the maximum value assumed in the safety analyses.  $F_a(z)$  normally decreases with increasing burnup because locations of peak power output in the core are also locations of peak depletion rate. However, cores using large numbers of burnable absorbers may show small increases in  $F_a^c(z)$  over some period of core life. If  $F_a^c(z)$  has increased since the last surveillance, a 2 percent allowance is added to  $F_a^c(z)$  (as one option permitted by Surveillance Requirement 4.2.2.2f) and the sum must meet the  $F_a^c(z)$  limit specified in TS 4.2.2.2d. The 2 percent allowance accounts for additional increases in  $F_a^c(z)$  that may occur prior to the next monthly flux map. A standard 2 percent allowance was originally selected because it bounded the maximum monthly increase in  $F_a^c(z)$  for typical cores (based on Westinghouse analyses of earlier core designs). Cores typical of the CPSES Unit 2, Cycle 2 design, with low leakage loading patterns, higher amounts of burnable poisons, and longer cycle lengths may exhibit  $F_a^c(z)$  increases in excess of 2 percent per month during some portion of the fuel cycle.

The NRC reviewed Westinghouse Topical Report WCAP-10216-P-A, Revision 1A and found it to be acceptable for referencing in licensing applications by letter dated November 26, 1993. As stated in the Safety Evaluation (SE) accompanying that letter, the NRC concluded that revisions to the  $F_a(z)$  TS surveillance requirements were acceptable for plants using constant axial offset control (CAOC) for power distribution control, provided that: (1) the new peaking factor penalties are incorporated in the Core Operating Limits Report (COLR), (2) the new peaking factor penalties are calculated using NRC-approved methods, and (3) the approved version of WCAP-10216-P, Revision 1A is included in the Administrative Reporting Requirements Section of the technical specifications.



CPSES Units 1 and 2 use CAOC for power distribution control and the proposed technical specification changes meet the above criteria. The larger  $F_Q(z)$  allowances will be included in the COLR as a replacement for the current technical specification value of 2 percent. Revisions to the COLR will be evaluated in accordance with 10 CFR 50.59. COLR revisions will assure conformance to 10 CFR 50.36. The NRC will be notified of all revisions to the COLR in accordance with TS 6.9.1.6. All COLR revisions will be based on NRC-approved methodologies. Revisions to the  $F_Q(z)$  penalty will be based on the Westinghouse methodology, previously reviewed and approved by the NRC, in WCAP-10216-P-A, Revision 1A. Calculating this cycle-specific parameter in accordance with an approved NRC methodology ensures that the parameters are consistent with the applicable safety analysis addressed in the CPSES final safety analysis report (FSAR) update.

Therefore, the staff finds the proposed changes acceptable.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendments. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendments change surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (59 FR 63127). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). This amendment also involves changes in record-keeping, reporting or administrative procedures or requirements. Accordingly, with respect to these items, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR §51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

## 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Timothy J. Polich

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