TENNESSEE VALLEY AUTHORITY WATTS BAR NUCLEAR PLANT (WBN) UNIT 1

PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE TS-98-005 MARKED PAGES

I. AFFECTED PAGE LIST

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II. MARKED PAGES

Attached

5.9.5 CORE OPERATING LIMITS REPORT (COLR)

- a. Core operating limits shall be established prior to the initial and each reload cycle, or prior to any remaining portion of a cycle, and shall be documented in the COLR for the following:
 - LCO 3.1.4 Moderator Temperature Coefficient
 - LCO 3.1.6 Shutdown Bank Insertion Limit
 - LCO 3.1.7 Control Bank Insertion Limits
 - LCO 3.2.1 Heat Flux Hot Channel Factor
 - LCO 3.2.2 Nuclear Enthalpy Rise Hot Channel Factor
 - LCO 3.2.3 Axial Flux Difference
 - LCO 3.9.1 Boron Concentration
- b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:
 - 1. WCAP-9272-P-A. WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY", July 1985 (W Proprietary). (Methodology for Specifications 3.1.4 Moderator Temperature Coefficient. 3.1.6 Shutdown Bank Insertion Limit, 3.1.7 Control Bank Insertion Limits, 3.2.1 Heat Flux Hot Channel Factor, 3.2.2 Nuclear Enthalphy Rise Hot Channel Factor. 3.2.3 Axial Flux Difference, and 3.9.1 Boron Concentration.
 - 2. WCAP-10266-P-A, Rev 2, "The 1981 VERSION OF WESTINGHOUSE EVALUATION MODEL USING BASH CODE," March 1987. (W Proprietary). (Methodology for Specification 3.2.1 Heat Flux Hot Channel Factor).
 - 3. WCAP-10216-P-A, Revision 1A, "RELAXATION OF CONSTANT AXIAL OFFSET CONTROL F(Q) SURVEILLANCE TECHNICAL SPECIFICATION," February 1994 (W Proprietary). (Methodology for Specifications 3.2.1 Heat Flux Hot Channel Factor (W(Z) Surveillance Requirements For F(Q) Methodology) and 3.2.3 Axial Flux Difference (Relaxed Axial Offset Control).)
 - 4. WCAP-12610-P-A, "VANTAGE + FUEL ASSEMBLY REFERENCE CORE REPORT," April 1995. (W Proprietary). (Methodology for Specification 3.2.1 Heat Flux Hot Channel Factor).

INSERT

5. WCAP-15088-P, Rev.1, "Safety Evaluation Supporting A More Negative EOL Moderator Temperature Coefficient Technical Specification for the Watts Bar Nuclear Plant," July 1999. (W Proprietary). (Methodology for Specification 3.1.4-Moderator Temperature Coefficient.)

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PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE TS-98-005 REVISED PAGES

I. AFFECTED PAGE LIST

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II. REVISED PAGES

ATTACHED



5.9 Reporting Requirements (continued)

5.9.5 CORE OPERATING LIMITS REPORT (COLR)

- Core operating limits shall be established prior to the initial and each reload cycle, or prior to any remaining portion of a cycle, and shall be documented in the COLR for the following:
 - Moderator Temperature Coefficient LCO 3.1.4
 - LCO 3.1.6 Shutdown Bank Insertion Limit
 - LCO 3.1.7 Control Bank Insertion Limits
 - Heat Flux Hot Channel Factor LCO 3.2.1
 - LCO 3.2.2 Nuclear Enthalpy Rise LCO 3.2.3 Axial Flux Difference Nuclear Enthalpy Rise Hot Channel Factor

 - LCO 3.9.1 Boron Concentration
- The analytical methods used to determine the core operating b. limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:
 - WCAP-9272-P-A. WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY", July 1985 (W Proprietary). (Methodology for Specifications 3.1.4 - Moderator Temperature Coefficient, 3.1.6 - Shutdown Bank Insertion Limit, 3.1.7 - Control Bank Insertion Limits, 3.2.1 - Heat Flux Hot Channel Factor, 3.2.2 - Nuclear Enthalphy Rise Hot Channel Factor, 3.2.3 - Axial Flux Difference, and 3.9.1 - Boron Concentration.
 - Wwcap-10266-P-A. Rev 2, "The 1981 VERSION OF WESTINGHOUSE EVALUATION MODEL USING BASH CODE." March 1987. (W Proprietary). (Methodology for Specification 3.2.1 - Heat Flux Hot Channel Factor).
 - WCAP-10216-P-A, Revision 1A, "RELAXATION OF CONSTANT AXIAL OFFSET CONTROL F(Q) SURVEILLANCE TECHNICAL SPECIFICATION. February 1994 (W Proprietary). (Methodology for Specifications 3.2.1 - Heat Flux Hot Channel Factor (W(Z) Surveillance Requirements For F(Q) Methodology) and 3.2.3 - Axial Flux Difference (Relaxed Axial Offset Control).)
 - WCAP-12610-P-A, "VANTAGE + FUEL ASSEMBLY REFERENCE CORE REPORT," April 1995. (W Proprietary). (Methodology for Specification 3.2.1 - Heat Flux Hot Channel Factor).
 - WCAP-15088-P, Rev.1, "Safety Evaluation Supporting A More Negative EOL Moderator Temperature Coefficient Technical Specification for the Watts Bar Nuclear Plant, "July 1999. (W Proprietary). (Methodology for Specification 3.1.4-Moderator Temperature Coefficient.)

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TENNESSEE VALLEY AUTHORITY WATTS BAR NUCLEAR PLANT (WBN) UNIT 1

WCAP-15088-P, REVISION 1 (PROPRIETARY) - ATTACHED

SAFETY EVALUATION SUPPORTING A MORE NEGATIVE EOL MODERATOR
TEMPERATURE COEFFICIENT TECHNICAL SPECIFICATION FOR THE WATTS BAR
NUCLEAR PLANT

TENNESSEE VALLEY AUTHORITY WATTS BAR NUCLEAR PLANT (WBN) UNIT 1

WCAP-15089-P, REVISION 1 (NON-PROPRIETARY) - ATTACHED

SAFETY EVALUATION SUPPORTING A MORE NEGATIVE EOL MODERATOR TEMPERATURE COEFFICIENT TECHNICAL SPECIFICATION FOR THE WATTS BAR NUCLEAR PLANT