

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

May 25, 2010

Vice President, Operations Entergy Operations, Inc. Waterford Steam Electric Station, Unit 3 17265 River Road Killona, LA 70057-3093

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 - ISSUANCE OF AMENDMENT NO. 226 RE: LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION 6.6.5, CORE OPERATING LIMITS REPORT (TAC NO. ME1359)

Dear Sir or Madam:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 226 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3 (Waterford 3). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated May 22, 2009, as supplemented by letter dated May 17, 2010.

The amendment modifies the Waterford 3 TS 6.9.1.11 to minimize the number of references that reflect NRC-approved methods used in establishing the Core Operating Limits Report (COLR) parameter limits, consistent with the guidance provided in NRC Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," dated October 3, 1988.

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

Sincerely,

N. Kalyanam, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosures:

- 1. Amendment No. 226 to NPF-38
- 2. Safety Evaluation

cc w/encls: Distribution via Listserv



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

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-382

WATERFORD STEAM ELECTRIC STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 226 License No. NPF-38

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (EOI), dated May 22, 2009, as supplemented by letter dated May 17, 2010, 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, 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 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-38 is hereby amended to read as follows:
 - 2. <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 226, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. EOI 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 and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Milel . Manley

Michael T. Markley, Chief Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License No. NPF-38 and Technical Specifications

Date of Issuance: May 25, 2010

ATTACHMENT TO LICENSE AMENDMENT NO. 226

TO FACILITY OPERATING LICENSE NO. NPF-38

DOCKET NO. 50-382

Replace the following pages of the Facility Operating License and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

<u>REMOVE</u>	INSERT

-4-

Technical Specifications

-4-

REMOVE	INSERT		
6-20	6-20		
6-20a	6-20a		
6-20D	6-20D		

or indirectly any control over (i) the facility, (ii) power or energy produced by the facility, or (iii) the licensees of the facility. Further, any rights acquired under this authorization may be exercised only in compliance with and subject to the requirements and restrictions of this operating license, the Atomic Energy Act of 1954, as amended, and the NRC's regulations. For purposes of this condition, the limitations of 10 CFR 50.81, as now in effect and as they may be subsequently amended, are fully applicable to the equity investors and any successors in interest to the equity investors, as long as the license for the facility remains in effect.

- (b) Entergy Louisiana, LLC (or its designee) to notify the NRC in writing prior to any change in (i) the terms or conditions of any lease agreements executed as part of the above authorized financial transactions, (ii) any facility operating agreement involving a licensee that is in effect now or will be in effect in the future, or (iii) the existing property insurance coverages for the facility, that would materially alter the representations and conditions, set forth in the staff's Safety Evaluation enclosed to the NRC letter dated September 18, 1989. In addition, Entergy Louisiana, LLC or its designee is required to notify the NRC of any action by equity investors or successors in interest to Entergy Louisiana, LLC that may have an effect on the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
 - 1. Maximum Power Level

EOI is authorized to operate the facility at reactor core power levels not in excess of 3716 megawatts thermal (100% power) in accordance with the conditions specified herein.

2. <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 226, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

ADMINISTRATIVE CONTROLS

INDUSTRIAL SURVEY OF TOXIC OR HAZARDOUS CHEMICALS REPORT

6.9.1.9 Surveys and analyses of major industries in the vicinity of Waterford 3 which could have significant inventories of toxic chemicals onsite to determine impact on safety shall be performed and submitted to the Commission at least once every 4 years.

6.9.1.10 A survey of major pipelines (\geq 4 inches) within a 2-mile radius of Waterford 3, which contain explosive or flammable materials and may represent a hazard to Waterford 3, including scaled engineering drawings or maps which indicate the pipeline locations, shall be performed and submitted to the Commission at least once every 4 years.

CORE OPERATING LIMITS REPORT COLR

6.9.1.11 Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT prior to each reload cycle or any remaining part of a reload cycle for the following:

- 3.1.1.1 SHUTDOWN MARGIN ANY CEA WITHDRAWN
- 3.1.1.2 SHUTDOWN MARGIN ALL CEAS FULLY INSERTED
- 3.1.1.3 MODERATOR TEMPERATURE COEFFICIENT
- 3.1.2.9 BORON DILUTION
- 3.1.3.1 CEA POSITION
- 3.1.3.6 REGULATING AND GROUP P CEA INSERTION LIMITS
- 3.2.1 LINEAR HEAT RATE
- 3.2.3 AZIMUTHAL POWER TILT T_q
- 3.2.4 DNBR MARGIN
- 3.2.7 AXIAL SHAPE INDEX
- 3.6.1.5 AIR TEMPERATURE, CONTAINMENT (Linear Heat Rate, 3.2.1)
- 3.9.1 BORON CONCENTRATION

6.9.1.11.1 The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC as follows:

- "Qualification of the PHOENIX-P/ANC Nuclear Design System for Pressurized Water Reactor Cores" (WCAP-11596-P-A), "ANC: A Westinghouse Advanced Nodal Computer Code" (WCAP-10965-P-A), and "ANC: A Westinghouse Advanced Nodal Computer Code: Enhancements to ANC Rod Power Recovery" (WCAP-10965-P-A Addendum 1) (Methodology for Specifications 3.1.1.1 and 3.1.1.2 for Shutdown Margins, 3.1.1.4 for MTC, 3.1.3.6 for Regulating and Group P CEA Insertion Limits, 3.2.4.b for DNBR Margin, 3.1.2.9 for Boron Dilution, and 3.9.1 for Boron Concentrations).
- "CE Method for Control Element Assembly Ejection Analysis," CENPD-0190-A (Methodology for Specification 3.1.3.6 for Regulating and Group P CEA Insertion Limits and 3.2.3 for Azimuthal Power Tilt).

CORE_OPERATING LIMITS REPORT COLR (Continued)

- "Modified Statistical Combination of Uncertainties, CEN-356(V)-P-A, Revision 01-P-A (Methodology for Specification 3.2.4.c and 3.2.4.d for DNBR Margin and 3.2.7 for ASI).
- 4) "Calculative Methods for the CE Large Break LOCA Evaluation Model," CENPD-132-P (Methodology for Specification 3.1.1.4 for MTC, 3.2.1 for Linear Heat Rate, 3.2.3 for Azimuthal Power Tilt, and 3.2.7 for ASI).
- "Calculative Methods for the CE Small Break LOCA Evaluation Model," CENPD-137-P (Methodology for Specification 3.1.1.4 for MTC, 3.2.1 for Linear Heat Rate, 3.2.3 for Azimuthal Power Tilt, and 3.2.7 for ASI).
- 6) "Technical Manual for the CENTS Code," WCAP-15996-P-A, Rev. 1 (Methodology for Specifications 3.1.1.1 and 3.1.1.2 for Shutdown Margin, 3.1.1.4 for MTC, 3.1.3.1 for CEA Position, 3.1.3.6 for Regulating and Group P Insertion Limits, and 3.2.4.b for DNBR Margin).
- 7) "Implementation of ZIRLO Material Cladding in CE Nuclear Power Fuel Assembly Designs," CENPD-404-P-A (Methodology for Specification 3.1.1.4 for MTC, 3.2.1 for Linear Heat Rate, 3.2.3 for Azimuthal Power Tilt, and 3.2.7 for ASI).
- "Qualification of the Two-Dimensional Transport Code PARAGON," WCAP-16045-P-A (may be used as a replacement for the PHOENIX-P lattice code as the methodology for Specifications 3.1.1.1 and 3.1.1.2 for Shutdown Margins, 3.1.1.4 for MTC, 3.1.3.6 for Regulating and Group P CEA Insertion Limits, 3.2.4.b for DNBR Margin, 3.1.2.9 for Boron Dilution, and 3.9.1 for Boron Concentrations).
- "Implementation of Zirconium Diboride Burnable Absorber Coatings in CE Nuclear Power Fuel Assembly Designs," WCAP-16072-P-A (Methodology for Specification 3.1.1.4 for MTC, 3.2.1 for Linear Heat Rate, 3.2.3 for Azimuthal Tilt, and 3.2.7 for ASI).
- 10) "CE 16 x 16 Next Generation Fuel Core Reference Report," WCAP-16500-P-A (Methodology for Specification 3.1.1.4 for MTC, 3.2.1 for Linear Heat Rate, 3.2.3 for Azimuthal Power Tilt, 3.2.4.b, 3.2.4.c and 3.2.4.d for DNBR Margin, and 3.2.7 for ASI).
- 11) "Optimized ZIRLO[™]," WCAP-12610-P-A and CENPD-404-P-A Addendum 1-A (Methodology for Specification 3.1.1.4 for MTC, 3.2.1 for Linear Heat Rate, 3.2.3 for Azimuthal Power Tilt, and 3.2.7 for ASI).
- 12) "Westinghouse Correlations WSSV and WSSV-T for Predicting Critical Heat Flux in Rod Bundles with Side-Supported Mixing Vanes," WCAP- 16523-P-A (Methodology for Specification 3.2.4.b, 3.2.4.c and 3.2.4.d for DNBR Margin).
- 13) "ABB Critical Heat Flux Correlations for PWR Fuel," CENPD-387-P-A (Methodology for Specification 3.2.4.b, 3.2.4.c and 3.2.4.d for DNBR Margin and 3.2.7 for ASI).

ADMINISTRATIVE CONTROLS

CORE OPERATING LIMITS REPORT COLR (Continued)

6.9.1.11.2 The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal 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.

6.9.1.11.3 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.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted in accordance with 10 CFR 50.4 within the time period specified for each report.

6.10 Not Used



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 226 TO

FACILITY OPERATING LICENSE NO. NPF-38

ENTERGY OPERATIONS, INC.

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NO. 50-382

1.0 INTRODUCTION

By application dated May 22, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091470271), as supplemented by letter dated May 17, 2010, (ADAMS Accession No. ML101400028), Entergy Operations, Inc. (the licensee), requested changes to the Technical Specifications (TSs) for Waterford Steam Electric Station, Unit 3 (Waterford 3). The supplemental letter dated May 17, 2010, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on June 30, 2009 (74 FR 31322).

The proposed changes would revise the Waterford 3 TS 6.9.1.11 to minimize the number of references that reflect NRC-approved methods used in establishing the Core Operating Limits Report (COLR) parameter limits, consistent with the guidance provided in NRC Generic Letter (GL) 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," dated October 3, 1988.

2.0 REGULATORY EVALUATION

In Section 50.36, "Technical specifications," of Title 10 of the *Code of Federal Regulations* (10 CFR 50.36), the Commission established its regulatory requirements related to the content of the TSs. Pursuant to 10 CFR 50.36, TSs are required to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements; (4) design features; and (5) administrative controls. The rule does not specify the particular requirements to be included in a plant's TSs. As stated in 10 CFR 50.36(c)(2)(i), the "[I]imiting conditions for operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications ..."

The regulations in 10 CFR 50.36(c)(2)(ii) state that a TS LCO of a nuclear reactor must be established for each item meeting one or more of the following criteria:

Criterion 1. Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

Criterion 2. A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Criterion 3. A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Criterion 4. A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

License amendments are generally required for each fuel cycle to update the values of cyclespecific parameter limits in TSs. However, to eliminate the need for a license amendment to update the cycle-specific parameter limits for each fuel cycle while meeting 10 CFR 50.36(c)(2)(ii) requirements, the NRC staff has allowed licensees to use an alternative to incorporate the cycle-specific parameter limits in the COLR.

Guidance on the relocation of cycle-specific TS parameters to the COLR is provided to all power reactor licensees and applicants in NRC GL 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," dated October 3, 1988. In GL 88-16, the NRC staff stated that license amendments are generally required every refueling outage to update the cycle-specific parameter limits in the TSs; however, there are methodologies developed for the licensee to determine these cycle-specific parameters that have been reviewed and approved by the staff. As a consequence, the NRC staff review of proposed changes to the TSs to update these parameter limits is primarily limited to the confirmation that the updated limits were calculated by the approved methodology and consistent with the appropriate plant-specific safety analysis. The COLR was created to place the NRC-approved methodologies in the TSs and allow licensees to use later revisions of these methodologies to update the parameters without requiring a change to the TSs.

3.0 TECHNICAL EVALUATION

3.1 Change to TS 6.9.1.11

In Reference 1, the licensee proposed to add the definition of the individual parameters for which cycle-specific limits are established in TS 6.9.1.11. Current TS 6.9.1.11 states:

6.9.1.11 Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT prior to each reload cycle or any remaining part of a reload cycle.

Revised TS 6.9.1.11 would state:

6.9.1.11 Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT prior to each reload cycle or any remaining part of a reload cycle for the following:

3.1.1.1	SHUTDOWN MARGIN – ANY CEA WITHDRAWN
3.1.1.2	SHUTDOWN MARGIN – ALL CEAS FULLY INSERTED
3.1.1.3	MODERATOR TEMPERATURE COEFFICIENT
3.1.2.9	BORON DILUTION
3.1.3.1	CEA POSITION
3.1.3.6	REGULATING AND GROUP P CEA INSERTION LIMITS
3.2.1	LINEAR HEAT RATE
3.2.3	AZIMUTHAL POWER TILT – Tq
3.2.4	DNBR MARGIN
3.2.7	AXIAL SHAPE INDEX
3.6.1.5	AIR TEMPERATURE, CONTAINMENT (Linear Heat Rate, 3.2.1)
201	BOBON CONCENTRATION

3.9.1 BORON CONCENTRATION

The first of the three separate actions to modify the plant's TS in GL 88-16 states:

... [t]he addition of the definition of a named formal report that includes the values of cycle-specific parameter limits that have been established using an NRC-approved methodology and consistent with all applicable limits of the safety analysis.

The licensee has proposed to add the definition of the individual parameters for which cyclespecific limits are established. This is consistent with the guidance in GL 88-16 and the NRC staff concludes it is acceptable.

3.2 Deletion of the Parenthetical COLR Parameter-to-Methodology Cross-References

In Reference 1, the licensee proposed to delete the parenthetical COLR parameter-tomethodology cross-references. However, the NRC staff concluded that the change was inappropriate because without the COLR parameter-to-methodology cross-references, the qualification for the approved methodology to be listed in TS 6.9.1.11.1 would be in question. In its supplemental letter dated May 17, 2010, the licensee agreed to retain the parenthetical COLR parameter-to-methodology cross-references in TS 6.9.1.11.1. The NRC staff concludes that this is acceptable.

3.3 Deletion of TS 6.9.1.11.1, Methods 1, 6, 7, and 8

In Reference 1, the licensee proposed to consolidate and organize the number of methods in TS 6.9.1.11.1. This resulted in deletion of Methods 1, 6, 7, and 8 and renumbering of methods. These methods currently state:

- "The ROCS and DIT Computer Codes for Nuclear Design," CENPD-266-P-A, and "C-E Methodology for Core Designs Containing Gadolinia-Urania Bumable Absorber," CENPD-275-P-A. (Methodology for Specifications 3.1.1.1 and 3.1.1.2 for Shutdown Margins, 3.1.1.3 for MTC, 3.1.3.6 for Regulating and group P CEA Insertion Limits, 3.1.2.9 Boron Dilution (Calculation of CBC & IBW), and 3.9.1 Boron Concentration).
- 6) "CESEC Digital Simulation for a Combustion Engineering Nuclear Steam Supply System," (CE letter LD-82-001 and NRC SE to CE dated April 3, 1984). (Methodology for Specification 3.1.1.1 and 3.1.1.2 for Shutdown Margins, 3.1.1.3 for MTC, 3.1.3.1 for Movable Control Assemblies - CEA Position, 3.1.3.6 for Regulating CEA and group P Insertion Limits, and 3.2.3 for Azimuthal Power Tilt).
- "Qualification of Reactor Physics Methods for the Pressurized Water Reactors of the Entergy System," ENEAD-01-P. (Methodology for Specifications 3.1.1.1 and 3.1.1.2 for Shutdown Margins, 3.1.1.3 for MTC, 3.1.3.6 for Regulating and group P CEA Insertion Limits, 3.1.2.9 Boron Dilution (Calculation of CBC & IBW), and 3.9.1 Boron Concentration).
- 8) "Fuel Rod Maximum Allowable Gas Pressure," CEN-372-P-A. (Methodology for Specification 3.2.1, Linear Heat Rate).

The guidance in NRC GL 88-16, in the section titled "DISCUSSION," states,

[A]n alternative to including the values of these cycle-specific parameters in individual specifications is provided ...

[T]his alternative consists of three separate actions to modify the plant's TS: (1) the addition of the definition of a named formal report that includes the values of cycle-specific parameter limits that have been established using an NRCapproved methodology and consistent with all applicable limits of the safety analysis ...

The licensee has consolidated and organized the number of methodologies used to determine the Waterford 3 COLR limits. Methods 1, 7, and 8 are no longer used in the COLR limits evaluation and the deletion is consistent with the general guidance provided in GL 88-16. In addition, the CESEC methodology, Method 6, will be deleted from the Waterford 3 TS 6.9.1.11.1, since it is not used to develop any of the Waterford 3 safety analysis limits. In

addition, based on the deletion of Methods 1, 6, 7, and 9, the remaining TS 6.9.1.11.1 Methods were renumbered. Based on the above, the NRC staff concludes that the deletion of Methods 1, 6, 7, and 8 from and renumbering methods in TS 6.9.1.11.1 is acceptable.

3.4 Deletion of TS 6.9.1.11.1, Method 19

In Reference 1, 2009, the licensee proposed to delete TS 6.9.1.11.1, Method 19, which currently states:

19) "Calculative Methods for the CE Nuclear Power Large Break LOCA Evaluation Model - Improvement to 1999 Large Break LOCA EM Steam Cooling Model for Less Than 1 in/sec Core Reflood" CENPD-132, Supplement 4-P-A, Addendum 1-P and Final Safety Evaluation for Westinghouse Electric Company (Westinghouse) Topical Report (TR) CENPD-132 Supplement 4-P-A, Addendum 1-P, "Calculative Methods for the CE [Combustion Engineering] Nuclear Power Large Break LOCA Evaluation Model - Improvement to 1999 Large Break LOCA EM Steam Cooling Model for Less Than 1 in/sec Core Reflood (Methodology for Specification 3.1.1.3 for MTC, 3.2.1 for Linear Heat Rate, 3.2.3 for Azimuthal Power Tilt, and 3.2.7 for ASI).

In Reference 1, the licensee stated that the above reference is already listed as Method 10 (renumbered Method 4) in the TS. The NRC staff concludes that the proposed deletion of TS 6.9.1.11.1, Method 19, is acceptable because it is already listed as Method 10 (renumbered Method 5), as stated below:

10) "Calculative Methods for the CE Nuclear Power Large Break LOCA Evaluation Model," CENPD-132 (Methodology for Specification 3.1.1.3 for MTC, 3.2.1 for Linear Heat Rate, 3.2.3 for Azimuthal Power Tilt and 3.2.7 for ASI).

In summary, a COLR TS amendment request should be submitted in accordance with the guidance specified in the Generic Letter 88-16. The COLR is a part of TS Administrative Controls which includes: (1) TS 6.9.1.11, parameters for core operating limits, (2) TS 6.9.1.11.1, NRC-approved analytical methods with approved date or revision to determine the core operating limits listed in TS 6.9.1.11, and (3) TS 6.9.1.11.3, the COLR, which shall be provided upon issuance for each reload cycle to the NRC. Therefore, the NRC staff expects the licensee, in its future COLR license amendment requests (LARs), to clearly identify and qualify those approved methodologies listed in TS 6.9.1.11.1, which are used to calculate the core operating limits listed in TS 6.9.1.11 as described in Section 3.2 of this evaluation in terms of parenthetical COLR parameter-to-methodology cross-references.

3.5 Renumbering of the TS 6.9.1.11.1

The renumbering of the methods, in sequence, in TS 6.9.1.11.1 is acceptable because it is administrative in nature.

3.6 <u>Summary</u>

Based on the results of the NRC staff review, the staff concludes that the proposed changes to TS 6.9.1.11, "Core Operating Limits Report (COLR)," with Reference 1 from the licensee's submittal for Core Operating Limits and to TS 6.9.1.11.1 for revised approved methodologies in Reference 2 from the licensee's submittal is acceptable because the proposed changes are administrative in nature and in compliance with the GL 88-16 guidance. The staff will require in future COLR TS LARs that the licensee should clearly identify and qualify those approved methodologies listed in TS 6.9.1.11.1 are directly used to calculate core operating limits listed in TS 6.9.1.11.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves 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 amendment involves no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on June 30, 2009 (74 FR 31322). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the 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.

7.0 <u>REFERENCES</u>

 Kowalewski, J. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "License Amendment Request NPF-38-281 to Revise Technical Specification 6.9.1.11, Core Operating Limits Report, Waterford Steam Electric Station, Unit 3 (Waterford 3), Docket No. 50-382, License No. NPF-38," dated May 22, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091470271). Walsh, K. T., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Associated with Core Operating Limits Report References, Arkansas Nuclear One Unit 2, Docket No. 50-368, License No. NPF-6, [and] Waterford Steam Electric Station Unit 3, Docket No. 50-382, License No. NPF-38," dated May 17, 2010 (ADAMS Accession No. ML101400028).

Principal Contributor: T. Huang, N. Kalyanam

Date: May 25, 2010

Vice President, Operations Entergy Operations, Inc. Waterford Steam Electric Station, Unit 3 17265 River Road Killona, LA 70057-3093

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 - ISSUANCE OF AMENDMENT NO. 226 RE: LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION 6.6.5, CORE OPERATING LIMITS REPORT (TAC NO. ME1359)

Dear Sir or Madam:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 226 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3 (Waterford 3). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated May 22, 2009, as supplemented by letter dated May 17, 2010.

The amendment modifies the Waterford 3 TS 6.9.1.11 to minimize the number of references that reflect NRC-approved methods used in establishing the Core Operating Limits Report (COLR) parameter limits, consistent with the guidance provided in NRC Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," dated October 3, 1988.

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

Sincerely,

/RA/

N. Kalyanam, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosures:

- 1. Amendment No. 290 to NPF-38
- 2. Safety Evaluation

cc w/encls: Distribution via Listserv

DISTRIBUTION: PUBLIC LPLIV r/f RidsAcrsAcnw_MailCTR Resource RidsNrrDirsItsb Resource

RidsNrrDorlLpl4 Resource RidsNrrDorlDpr Resource RidsNrrDssSrxb Resource RidsNrrPMWaterford Resource RidsNrrLAJBurkhardt Resource RidsOgcRp Resource RidsRgn4MailCenter Resource THuang, NRR/DSS/SRXB

ADAMS Accession No. ML101340109

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/DIRS/ITSB	NRR/DSS/SRXB	OGC	NRR/LPL4/BC	NRR/LPL4/PM	
NAME	NKalyanam	JBurkhardt	REIliott	AUIses	BHarris	MMarkley	NKalyanam	
DATE	5/20/10	5/20/10	5/20/10	5/21/10	5/21/10	5/24/10	5/25/10	

OFFICIAL RECORD COPY