50-382

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

January 15, 1998

Mr. Charles M. Dugger
Vice President Operations
Entergy Operations, Inc.
P. O. Box B
Killona, LA 70066

SUBJECT: ISSUANCE OF AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NPF-38 - WATERFORD STEAM ELECTRIC STATION, UNIT 3 (TAC NO. M99682)

Dear Mr. Dugger:

The Commission has issued the enclosed Amendment No 138 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated September 25, 1997.

The amendment changes the Appendix A TSs by adopting the Model TS wording that the licensee took exception to during the previous Appendix J Option B amendment request. At that time the staff questioned the partial adoption of the Model TS for TS 3.6.1.2 since not all leak rate testing is performed during refueling outages. The staff requested a supplemental letter describing the differences between the proposed Waterford 3 TSs and the Model TS. In your letter dated March 14, 1997, you justified the exceptions in part by the fact that the proposed specifications were more conservative by six hours and would in the case of TS 3.6.1.2 place the plant in TS 3.0.3 which would require a hour shutdown. This was further specified in the safety evaluation dated April 10, 1997. However, your application dated September 25, 1997, states that this is an inadvertent decrease in allowed outage time and requests a expeditious review due to the possibility of an unnecessary plant shutdown if a purge valve or containment air lock fails a leakage test at power.

The staff disagrees that this was an inadvertent decrease. This is in fact the third submittal on Appendix J Option B that has been submitted to the NRC staff. The first attempt was dated October 16, 1996. The staff found that submittal totally inadequate and you subsequently withdrew that submittal with your resubmittal on December 2, 1996. This second submittal required two supplements dated February 4 and March 14, 1997, and still took exceptions to the Model TS. After realizing the operational implications of taking those exceptions you have submitted another request and requested expeditious review. This series of submittals represents a lack of attention to detail and coordination of your license amendment requests. Therefore, the staff denies your request for expeditious consideration of your amendment request.

The amendment also changes the Appendix A TSs 3.6.1.2 and 6.15 by clarifying that containment leakage rates are the overall containment leakage rate and the secondary containment bypass leakage rate, and corrects TS 6.15 air lock door seal leakage rate acceptance criteria to use the Waterford 3 plant specific value of 0.005 La rather than the 0.01La value that was incorrectly inserted into the previous proposal.

DFO1

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

Sincerely,

for Chandu P. Patel, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosures: 1. Amendment No. 138 to NPF-38
2. Safety Evaluation

cc w/encls: See next page

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

Sincerely,
Original signed by Timothy J. Polich

Chandu P. Patel, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosures: 1. Amendment No.138to NPF-38
2. Safety Evaluation

cc w/encls: See next page

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COPY	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO

signed TJP 1/15/98

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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. 138
License No. NPF-38

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Entergy Operations, Inc. (the licensee) dated September 25, 1997, 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) Technical Specifications and Environmental Protection Plan

   The Technical Specifications contained in Appendix A, as revised through Amendment No.138, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee 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.

FOR THE NUCLEAR REGULATORY COMMISSION

for Chandu P. Patel, 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: January 15, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 138

TO FACILITY OPERATING LICENSE NO. NPF-38

DOCKET NO. 50-382

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

REMOVE PAGES	INSERT PAGES
3/4 6-2	3/4 6-2
6-25	6-25

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations* not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except for valves that are open under administrative control as permitted by Specification 3.6.3.

b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.

c. After each closing of each penetration subject to Type B testing, except containment air locks, if opened following a Type A or B test, by leak rate testing the seal in accordance with the Containment Leakage Rate Testing Program.

*Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often than once per 92 days.

CONTAINMENT SYSTEMS

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 The overall containment leakage rate and the secondary containment bypass leakage rate shall be in accordance with the Containment Leakage Rate Testing Program.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With the overall containment leakage rate and/or the secondary containment bypass leakage rate not within limits, restore containment leakage rate(s) to within limits within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.2 The overall containment leakage rate and the secondary bypass leakage rate shall be determined in accordance with the Containment Leakage Rate Testing Program.

PROCESS CONTROL PROGRAM (Continued)

2. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.

b. Shall become effective after review and acceptance by the PORC and the approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 The ODCM shall be approved by the Commission prior to implementation.

6.14.2 Licensee-initiated changes to the ODCM:

a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.3p. This document shall contain:

1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and

2. A determination that the change will maintain the level of radioactive effluent control required pursuant to 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose or setpoint calculations.

b. Shall become effective after review and acceptance by the PORC and the approval of the Plant Manager.

c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

6.15 CONTAINMENT LEAKAGE RATE TESTING PROGRAM

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995.

The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a, is 44 psig.

The maximum allowable containment leakage rate, L_a, is 0.5% of containment air weight per day at P_a.

CONTAINMENT LEAKAGE RATE TESTING PROGRAM (Continued)

Leakage rate acceptance criteria are:

a. Overall containment leakage rate acceptance criteria is $\leq$ 1.0 L_a. During the first unit startup following each test performed in accordance with this program, the overall containment leakage rate acceptance criteria are $\leq$ 0.60 L_a for the Type B and Type C tests and $\leq$ 0.75 L_a for Type A tests.

b. Air lock acceptance criteria are:

1. Overall air lock leakage rate is $\leq$ 0.05 L_a when tested at $\geq$ P_a.

2. Leakage rate for each door seal is $\leq$ 0.005 L_a when pressurized to $\geq$ 10 psig.

c. Secondary containment bypass leakage rate acceptance criteria is $\leq$ 0.06 L_a when tested at $\geq$ P_a.

d. Containment purge valves with resilient seals acceptance criteria is $\leq$ 0.06 L_a when tested at $\geq$ P_a.

The provisions of Specification 4.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

The provisions of Specification 4.0.3 are applicable to the Containment Leakage Rate Testing Program.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 138 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 September 25, 1997, Entergy Operations, Inc. (the licensee), submitted a request for changes to the Waterford Steam Electric Station, Unit 3, Technical Specifications (TSs). The requested changes would modify the Limiting Condition for Operation (LCO) 3.6.1.2 (Containment Leakage), the associated Action, and Surveillance Requirement (SR) 4.6.1.2 for Waterford Steam Electric Station, Unit 3 (Waterford 3). The air lock door seal leakage rate acceptance criteria in TS 6.15 is being changed from $0.01L_a$ to $0.005L_a$. TS 6.15 is also being modified to make the terms used in the Containment Leakage Rate Testing Program consistent with terms used in the TS.

2.0 BACKGROUND

By application dated December 2, 1996, the licensee requested an amendment to incorporate 10 CFR Part 50 Appendix J, Option B into the Waterford 3 TS. The licensee used the NEI guidelines (Nuclear Energy Institute Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J) to develop this change. By letter dated November 2, 1995, the NRC provided NEI with Model TS which were written for Improved TS for a boiling water reactor (BWR) 4 (NUREG 1432). However, the Model TS wording was not fully adapted by the licensee since the Waterford 3 TS were written to the Combustion Engineering Standard TS (NUREG 0212). The staff questioned the partial adoption of the Model TS and requested a supplemental letter describing the differences between the proposed Waterford 3 TSs and the Model TS. In a letter dated March 14, 1997, the licensee submitted such a description.

The March 14, 1997, letter specifically took exception to the Model TS for Waterford 3 TSs 3.6.1.2, 3.6.1.3, and 3.6.1.7 and justified the exceptions in part by the fact that the proposed specifications were more conservative by six hours and would in the case of TS 3.6.1.2 place the plant in TS 3.0.3. The staff issued the license amendment on April 10, 1997, and acknowledged the more conservative Waterford 3 TS in the safety evaluation. Since the licensee chose to retain the wording of TS 3.6.1.2 and did not exclude containment air lock door or containment purge valve leakage (TSs 3.6.1.3 and 3.6.1.7), the default conservative action upon identifying any containment leakage rates not within limits is to enter TS 3.0.3 which requires a plant shutdown within one hour. Thus the time to restore an air lock door or a containment purge valve that failed to meet its allowable leakage rate (TSs 3.6.1.3 Action b and 3.6.1.7 Action b) was reduced from 24 hours to one hour. While the Waterford 3 TS is more restrictive and for

that reason found acceptable in the April 10, 1997, safety evaluation. It was not the intent of Appendix J, Option B, to require such a restriction; however, since the licensee chose not to adapt the Model TS wording which was intended to correct this situation, the more restrictive specification applied.

Additionally, the Model TS did contain an outline for the Containment Leak Rate Testing Program with bracketed values. The proposed Waterford 3 TS used the Model TS and adopted the bracketed values without replacing them with plant specific values for the air lock door. This resulted in a less conservation value. This discrepancy was not identified during the review and approval of the previous amendment. However, the licensee did not use the less conservative value and retained the correct value in their procedures.

3.0 EVALUATION

The licensee's December 2, 1996, letter to the NRC proposed to establish a "Primary Containment Leakage Rate Program" and proposed to add this program to the technical specifications. The program referenced Regulatory Guide 1.163 which specifies methods acceptable to the staff for complying with Option B. This required changes to TS 3/4.6.1.1, "Containment Integrity," 3/4.6.1.2, "Containment Leakage," 3/4.6.1.3, "Containment Air Locks," 3/4.6.1.6, "Containment Vessel Structural Integrity," and 3/4.6.1.7, "Containment Ventilation System," and added Specification 6.15, "Containment Leakage Rate Testing Program," to implement the performance-based leakage rate testing program as permitted by 10 CFR Part 50, Appendix J, Option B.

The staff reviewed the licensee's proposed TS changes and found them consistent with the requirements of 10 CFR Part 50, Appendix J, Option B, in that the changes included general reference in the TS to the regulatory guide used by the licensee to develop the performance-based leakage-testing program for Waterford 3. The staff also compared the proposed TS with the Model TS in the November 2, 1995, letter to NEI, and found them to be consistent with the intent of the model TS, with several exceptions. Specifically, the April 10, 1997, safety evaluation Section 3.1.2 noted the licensee's desire to not adopt the Model TS for Waterford 3 TS 3.6.1.2 which recognized that containment leakage rates can be determined during plant operation (Modes 1 through 4). Further, Section 3.1.2 identified that the specific value for bypass leakage had been moved to the Administrative Controls section of the TS, consistent with other specific values listed for containment leakage and air lock leakage.

The licensee's current proposal is to remove the wording "prior to increasing the Reactor Coolant System temperature above 200°F." and replace it with "within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours." The staff finds that this change follows the Model TS and is slightly more restrictive by six hours than the Model TS, which allows 12 hours to hot standby and 36 hours to cold shutdown and is, therefore, acceptable.

Additionally, the licensee proposed to clarify in Waterford 3 TSs 3.6.1.2 and 6.15 that containment leakage rates are the overall containment leakage rate and the secondary containment bypass leakage rate. This change explicitly states the information currently implied in Waterford 3 TS 6.15. The staff finds this change acceptable.

Finally, the proposed change to Waterford 3 TS 6.15 air lock door seal leakage rate acceptance criteria is to use the Waterford 3 plant specific value of 0.005 L_a rather than the 0.01L_a value that was incorrectly inserted into the previous proposal. The staff finds this acceptable since it returns the value to the correct plant specific value which is more conservative.

3.0 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.

4.0 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 and changes surveillance requirements. 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 (62 FR 54872). 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.

5.0 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. Polich

Date: January 15, 1998