

May 29, 1997

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

SUBJECT: ISSUANCE OF AMENDMENT NO. 129 TO FACILITY OPERATING LICENSE
NPF-38 - WATERFORD STEAM ELECTRIC STATION, UNIT 3 (TAC NO. M98060)

Dear Mr. Dugger:

The Commission has issued the enclosed Amendment No.129 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 February 5, 1997, as supplemented by letter dated March 26, 1997.

The amendment changes the Appendix A TSs by revising Technical Specifications 3.1.2.7, 3.1.2.8, 3.5.1, 3.5.4, 3.9.1, and Bases 3/4.1.2. The changes will increase the minimum boron concentration in the Safety Injection Tanks and the Refueling Water Storage Pool from 1720 to 2050 ppm.

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,
Orig. signed by
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.129 to NPF-38
2. Safety Evaluation

cc w/encls: See next page

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

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Entergy Operations, Inc.
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The amendment changes the Appendix A TSs by revising Technical Specifications 3.1.2.7, 3.1.2.8, 3.5.1, 3.5.4, 3.9.1, and Bases 3/4.1.2. The changes will increase the minimum boron concentration in the Safety Injection Tanks and the Refueling Water Storage Pool from 1720 to 2050 ppm.

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Office of Nuclear Reactor Regulation

Docket No. 50-382

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Mr. Charles M. Dugger
Entergy Operations, Inc.

Waterford 3

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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. 129
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 February 5, 1997, as supplemented by letter dated March 26, 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. 129, 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 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Chandu P. Patel

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: May 29, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 129

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

3/4 1-12
3/4 1-14
3/4 5-1
3/4 5-9
3/4 9-1
B3/4 1-2

INSERT PAGES

3/4 1-12
3/4 1-14
3/4 5-1
3/4 5-9
3/4 9-1
B3/4 1-2

REACTIVITY CONTROL SYSTEMS

BORIC ACID MAKEUP PUMPS - OPERATING

LIMITING CONDITION FOR OPERATION

3.1.2.6 At least the boric acid makeup pump(s) in the boron injection flow path(s) required OPERABLE pursuant to Specification 3.1.2.2a. shall be OPERABLE and capable of being powered from an OPERABLE emergency bus if the flow path through the boric acid pump(s) in Specification 3.1.2.2a. is OPERABLE.

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

ACTION:

With one boric acid makeup pump required for the boron injection flow path(s) pursuant to Specification 3.1.2.2a. inoperable, restore the boric acid makeup pump to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and borated to a SHUTDOWN MARGIN equivalent to the requirements of Specification 3.1.1.1 or 3.1.1.2, whichever is applicable, restore the above required boric acid makeup pump(s) to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.6 Each required boric acid makeup pump shall be demonstrated OPERABLE at least once every 18 months by verifying that each boric acid makeup pump starts in response to an SIAS test signal.

REACTIVITY CONTROL SYSTEMS

BORATED WATER SOURCES - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.1.2.7 As a minimum, one of the following borated water sources shall be OPERABLE:

- a. One boric acid makeup tank with a boron concentration between 2.25 and 3.50 weight percent and a minimum borated water volume of 4150 gallons (36% indicated level).
- b. The refueling water storage pool (RWSP) with:
 1. A minimum contained borated water volume of 65,465 gallons (12% indicated level), and
 2. A minimum boron concentration of 2050 ppm.

APPLICABILITY: MODES 5 and 6.

ACTION:

With no borated water sources OPERABLE, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.1.2.7 The above required borated water source shall be demonstrated OPERABLE:

- a. At least once per 24 hours when the Reactor Auxiliary Building air temperature is less than 55°F by verifying the boric acid makeup tank solution is greater than 55°F (when it is the source of borated water).
- b. At least once per 7 days by:
 1. Verifying the boron concentration of the water, and
 2. Verifying the contained borated water volume of the tank.

REQUIRED STORED BORIC ACID VOLUME AS A FUNCTION OF CONCENTRATION

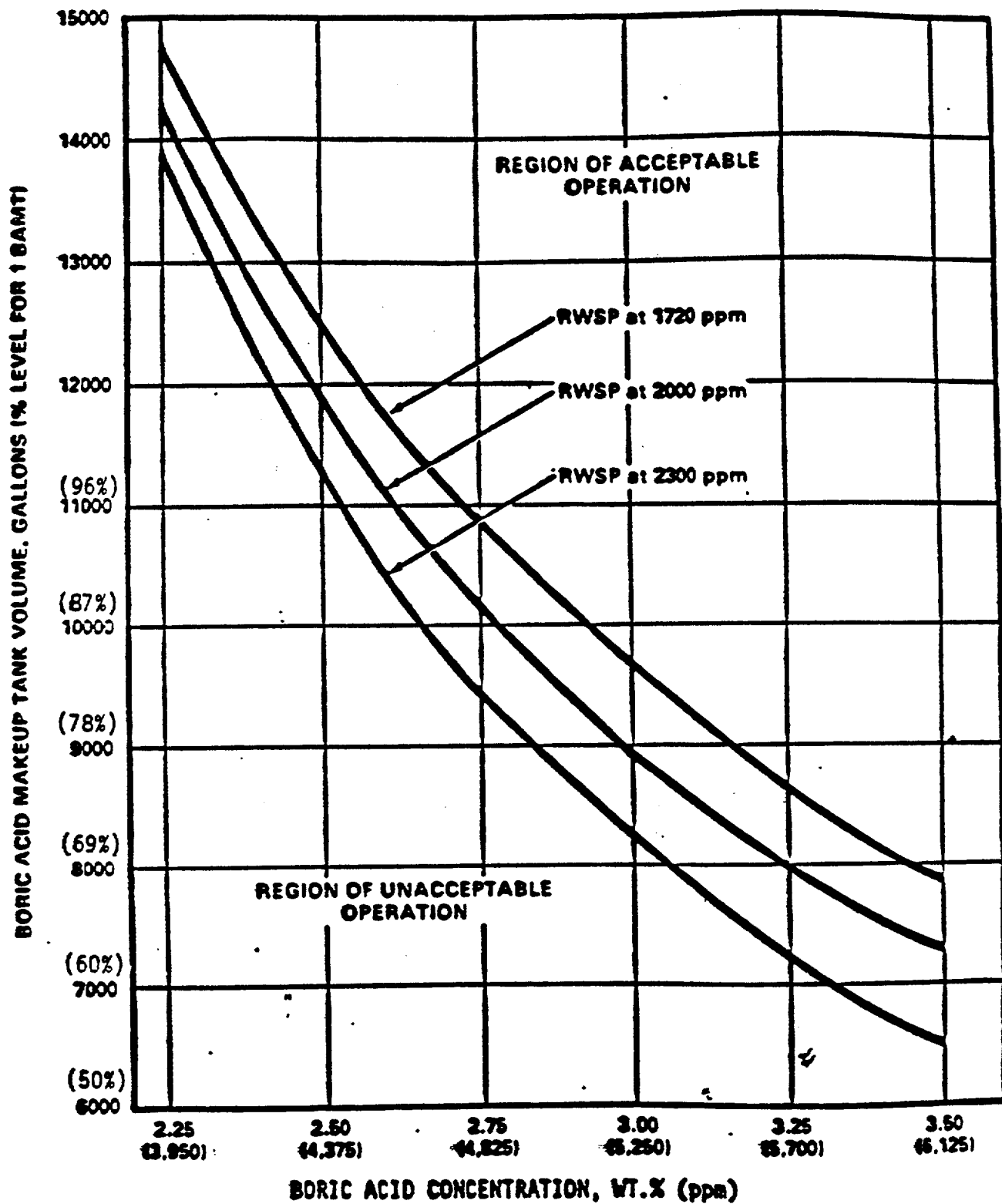


FIGURE 3.1-1

REACTIVITY CONTROL SYSTEMS

BORATED WATER SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION

3.1.2.8 Each of the following borated water sources shall be OPERABLE:

- a. At least one of the following sources:
 - 1) One boric acid makeup tank, with the tank contents in accordance with Figure 3.1-1, or
 - 2) Two boric acid makeup tanks, with the combined contents of the tanks in accordance with Figure 3.1-1, and
- b. The refueling water storage pool with:
 1. A minimum contained borated water volume of 475,500 gallons (83% of indicated level), and
 2. A boron concentration of between 2050 and 2300 ppm of boron, and
 3. A solution temperature between 55°F and 100°F.

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

ACTION:

- a. With the above required boric acid makeup tank(s) inoperable, restore the tank(s) to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and borated to a SHUTDOWN MARGIN equivalent to the requirements of Specification 3.1.1.1 or 3.1.1.2, whichever is applicable; restore the above required boric acid makeup tank(s) to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.
- b. With the refueling water storage pool inoperable, restore the pool to OPERABLE status 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

4.1.2.8 Each borated water source shall be demonstrated OPERABLE:

- a. At least once per 24 hours by verifying the RWSP temperature when the Reactor Auxiliary Building air temperature is less than 55°F or greater than 100°F.
- b. At least once per 24 hours by verifying the BAMT temperature is above 55°F when the Reactor Auxiliary Building air temperature is less than 55°F.
- c. At least once per 7 days by:
 1. Verifying the boron concentration in the water, and
 2. Verifying the contained borated water volume of the water source.

3/4.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

3/4.5.1 SAFETY INJECTION TANKS

LIMITING CONDITION FOR OPERATION

3.5.1 Each Reactor Coolant System safety injection tank shall be OPERABLE with:

- a. The isolation valve open,
- b. A contained borated water volume of between 926 (40%) and 1807 (83.8%) cubic feet,
- c. Between 2050 and 2300 ppm of boron, and
- d. A nitrogen cover-pressure of between 600 and 670 psig.

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

ACTION:

- a. With one safety injection tank inoperable, except as a result of a closed isolation valve, restore the inoperable tank to OPERABLE status within 1 hour or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With one safety injection tank inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in at least HOT STANDBY within 1 hour and be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.1 Each safety injection tank shall be demonstrated OPERABLE:

- a. At least once per 12 hours by:
 1. Verifying the contained borated water volume and nitrogen cover-pressure in the tanks, and
 2. Verifying that each safety injection tank isolation valve is open.

*With pressurizer pressure greater than or equal to 1750 psia. When pressurizer pressure is less than 1750 psia, at least three safety injection tanks must be OPERABLE, each with a minimum pressure of 235 psig and a maximum pressure of 670 psig, and a contained borated water volume of between 1332 (61%) and 1807 (83.8%) cubic feet. With all four safety injection tanks OPERABLE, each tank shall have a minimum pressure of 235 psig and a maximum pressure of 670 psig, a boron concentration of between 2050 and 2300 ppm boron, and a contained borated water volume of between 888 (39%) and 1807 (83.8%) cubic feet. In MODE 4 with pressurizer pressure less than 392 psia (700 psia for remote shutdown from LCP-43), the safety injection tanks may be isolated.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.4 REFUELING WATER STORAGE POOL

LIMITING CONDITION FOR OPERATION

3.5.4 The refueling water storage pool shall be OPERABLE with:

- a. A minimum contained borated water volume of 475,500 gallons (83% indicated level),
- b. Between 2050 and 2300 ppm of boron, and
- c. A solution temperature of between 55°F and 100°F.

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

ACTION:

With the refueling water storage pool inoperable, restore the pool to OPERABLE status 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

4.5.4 The RWSP shall be demonstrated OPERABLE:

- a. At least once per 7 days by:
 1. Verifying the contained borated water volume in the pool, and
 2. Verifying the boron concentration of the water.
- b. At least once per 24 hours by verifying the RWSP temperature when the RAB air temperature is less than 55°F or greater than 100°F.

3/4.9 REFUELING OPERATIONS

3/4.9.1 BORON CONCENTRATION

LIMITING CONDITION FOR OPERATION

3.9.1 With the reactor vessel head closure bolts less than fully tensioned or with the head removed, the boron concentration of all filled portions of the Reactor Coolant System and the refueling canal shall be maintained uniform and sufficient to ensure that the more restrictive of the reactivity conditions specified in the COLR is met.

APPLICABILITY: MODE 6*.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes and initiate action to restore boron concentration to within COLR limits.

SURVEILLANCE REQUIREMENTS

4.9.1.1 The more restrictive of the above two reactivity conditions shall be determined prior to:

- a. Removing or unbolting the reactor vessel head, and
- b. Withdrawal of any full-length CEA in excess of 3 feet from its fully inserted position within the reactor pressure vessel.

4.9.1.2 The boron concentration of the Reactor Coolant System and the refueling canal shall be determined by chemical analysis at least once per 72 hours.

*The reactor shall be maintained in MODE 6 whenever fuel is in the reactor vessel with the reactor vessel head closure bolts less than fully tensioned or with the head removed.

REFUELING OPERATIONS

3/4.9.2 INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.9.2 As a minimum, two source range neutron flux monitors shall be OPERABLE and operating, each with continuous visual indication in the control room and one with audible indication in the containment and control room.

APPLICABILITY: MODE 6.

ACTION:

- a. With one of the above required monitors inoperable or not operating, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes.
- b. With both of the above required monitors inoperable or not operating, determine the boron concentration of the Reactor Coolant System at least once per 12 hours.

SURVEILLANCE REQUIREMENTS

4.9.2 Each source range neutron flux monitor shall be demonstrated OPERABLE by performance of:

- a. A CHANNEL CHECK at least once per 12 hours,
- b. A CHANNEL FUNCTIONAL TEST within 8 hours prior to the initial start of CORE ALTERATIONS, and
- c. A CHANNEL FUNCTIONAL TEST at least once per 7 days.

3/4.1 REACTIVITY CONTROL SYSTEMS

BASES

3/4.1.1 BORATION CONTROL

3/4.1.1.1 and 3/4.1.1.2 SHUTDOWN MARGIN

SHUTDOWN MARGIN is the amount by which the core is subcritical, or would be subcritical immediately following a reactor trip, considering a single malfunction resulting in the highest worth CEA failing to insert.

The function of SHUTDOWN MARGIN is to ensure that the reactor remains subcritical following a design basis accident or anticipated operational occurrence. During operation in MODES 1 and 2, with k_{eff} greater than or equal to 1.0, the transient insertion limits of Specification 3.1.3.6 ensure that sufficient SHUTDOWN MARGIN is available.

SHUTDOWN MARGIN requirements vary throughout the core life as a function of fuel depletion and reactor coolant system (RCS) cold leg temperature (T_{cold}). The most restrictive condition occurs at EOL, with (T_{cold}) at no-load operating temperature, and is associated with a postulated steam line break accident and the resulting uncontrolled RCS cooldown. In the analysis of this accident, the specified SHUTDOWN MARGIN is required to control the reactivity transient and ensure that the fuel performance and offsite dose criteria are satisfied. As (initial) T_{cold} decreases, the potential RCS cooldown and the resulting reactivity transient are less severe and, therefore, the required SHUTDOWN MARGIN also decreases. Below T_{cold} of about 200°F, the inadvertent deboration event becomes limiting with respect to the SHUTDOWN MARGIN requirements. Below 200°F, the specified SHUTDOWN MARGIN ensures that sufficient time for operator actions exists between the initial indication of the deboration and the total loss of SHUTDOWN MARGIN. Accordingly, the SHUTDOWN MARGIN requirements are based upon these limiting conditions.

Additional events considered in establishing requirements on SHUTDOWN MARGIN are single CEA withdrawal and startup of an inactive reactor coolant pump.

Other technical specifications that reference the Specifications on SHUTDOWN MARGIN are: 3/4.1.2, BORATION SYSTEMS, 3/4.1.3, MOVABLE CONTROL ASSEMBLIES, 3/4.9.1, REFUELING OPERATIONS - BORON CONCENTRATION, and 3/4.10.1, SHUTDOWN MARGIN.

3/4.1.1.3 MODERATOR TEMPERATURE COEFFICIENT

The limitations on moderator temperature coefficient (MTC) are provided to ensure that the assumptions used in the accident and transient analysis remain valid through each fuel cycle. The Surveillance Requirements for measurement of the MTC during each fuel cycle are adequate to confirm the MTC value since this coefficient changes slowly due principally to the reduction in RCS boron concentration associated with fuel burnup. The confirmation that the measured MTC value is within its limit provides assurances that the coefficient will be maintained within acceptable values throughout each fuel cycle.

REACTIVITY CONTROL SYSTEMS

BASES

3/4.1.1.4 MINIMUM TEMPERATURE FOR CRITICALITY

This specification ensures that the reactor will not be made critical with the Reactor Coolant System cold leg temperature less than 520°F. This limitation is required to ensure (1) the moderator temperature coefficient is within its analyzed temperature range, (2) the protective instrumentation is within its normal operating range, (3) the pressurizer is capable of being in an OPERABLE status with a steam bubble, (4) the reactor pressure vessel is above its minimum RT_{NDT} temperature, and (5) the ECCS analysis remains valid for the peak linear heat rate of Specification 3.2.1.

3/4.1.2 BORATION SYSTEMS

The boron injection system ensures that negative reactivity control is available during each mode of facility operation. The components required to perform this function include (1) borated water sources, (2) charging pumps, (3) separate flow paths, (4) boric acid makeup pumps, (5) associated heat tracing systems, and (6) an emergency power supply from OPERABLE diesel generators.

With the RCS average temperature above 200°F, a minimum of two separate and redundant boron injection systems are provided to ensure single functional capability in the event an assumed failure renders one of the systems inoperable. Allowable out-of-service periods ensure that minor component repair or corrective action may be completed without undue risk to overall facility safety from injection system failures during the repair period.

The boration capability of either system is sufficient to provide a SHUT-DOWN MARGIN from expected operating conditions of 2.0% delta k/k after xenon decay and cooldown to 200°F. The maximum expected boration capability requirement occurs at EOL from full power equilibrium xenon conditions assuming the most reactive CEA stuck out of the core and requires boric acid solution from the boric acid makeup tanks in the allowable concentrations and volumes of Specification 3.1.2.8 plus approximately 19,000 gallons of 2050 ppm borated water from the refueling water storage pool or approximately 58,000 gallons of 2050 ppm borated water from the refueling water storage pool alone. The higher limit of 447,100 gallons is specified to be consistent with Specification 3.5.4 in order to meet the ECCS requirements.

With the RCS temperature below 200°F one injection system is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the additional restrictions prohibiting CORE ALTERATIONS and positive reactivity changes in the event the single injection system becomes inoperable.

The boron capability required below 200°F is based upon providing a 2% delta k/k SHUTDOWN MARGIN after xenon decay and cooldown from 200°F to 140°F. This condition requires either 5,465 gallons of 2050 ppm borated water from the refueling water storage pool or boric acid solution from the boric acid makeup tanks in accordance with the requirements of Specification 3.1.2.7.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 129 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 February 5, 1997, as supplemented by letter dated March 26, 1997, Entergy Operations, Inc. (the licensee), submitted a request for changes to the Waterford Steam Electric Station, Unit 3, (Waterford 3), Technical Specifications (TSs). The requested changes would revise Technical Specifications 3.1.2.7, 3.1.2.8, 3.5.1, 3.5.4, 3.9.1, and Bases 3/4.1.2. The changes will increase the minimum boron concentration in the Safety Injection Tanks (SIT) and the Refueling Water Storage Pool (RWSP) from 1720 to 2050 ppm. The proposed change will ensure that the minimum boron concentration required by the TS, is consistent with the safety analysis for the Waterford 3, Fuel Cycle 9. The staff concurs that the proposed TS change is consistent with the Technical Specification Improvement Program as supported in the implemented NUREG-1366 "Improvements to Technical Specification Surveillance Requirements" and NUREG-1432 "Standard Technical Specifications Combustion Engineering Plants".

The March 26, 1997, letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination or expand the scope of the original Federal Register notice.

2.0 EVALUATION

2.1 Description of the SIT and the RWSP

The Safety Injection Tank is a passive injection system containing borated water under a pressurized nitrogen cover. No outside operator action is required for operation. The SITs are connected to the reactor coolant system (RCS) cold leg by a line containing two check valves that isolate the tanks from the RCS during normal operations. When the RCS pressure falls below the tank pressure, the check valves open, discharging the contents of the SITs into the RCS.

The function of the tanks is to reflood the core following a large break loss of coolant accident (LBLOCA). Adequate borated water is supplied in the four tanks to flood the core assuming the contents of one of the tanks is lost

The RWSP is used to store borated water for use in both the Safety Injection and the Containment Spray Systems. The RWSP is designed to be the main source of borated water to the Engineered Safeguard Feature (ESF) pumps, prior to reaching a low-level switchover to the Safety Injection Sump for recirculation. The minimum boron concentration of the RWSP guarantees that the core will remain subcritical in a cold condition following a mixing of the RWSP and the RCS water volumes with all the control rods inserted except for the most reactive control assembly which conservatively is assumed to be in a fully withdrawn position. The upper TS limit of 2300 ppm is a maximum boron concentration requirement based upon boric acid precipitation rates in the reactor core in post LOCA conditions. No change is being proposed for this limit.

2.2 LBLOCA Analysis

In the analysis of the LBLOCA, it is assumed that the RCS depressurizes to the point at which the SIT discharges into the RCS. During the initial stages of reflooding, heavily borated water from the SIT provides core cooling and reactivity control. In the event that there is a need to make an addition to the SITs, the makeup source is the RWSP.

If makeup to the RWSP is required, the operators should have no trouble in providing the necessary makeup. However, it should be pointed out that the proposed change will result in a much tighter band on the boron concentration in the RWSP. This is a minor impact on operator actions because the frequency of changes required to adjust both the SIT and RWSP is relatively low.

2.3 Technical Specification Changes

The proposed change in the boron concentration in the SITs and the RWSP from 1720 ppm to 2050 ppm, is necessitated by Waterford 3 going to a longer cycle (for upcoming Cycle 9), an increase in the fuel enrichment, and a reduction in rod shimming. The reduction in rod shimming is caused by licensee's decision use Erbium as the integral poison. Use of Erbium has been documented by ABB in ABB topical report CEN-382-P-A, "Methodology for Core Designs Containing Erbium Burnable Absorbers," ABB Combustion Engineering Nuclear Fuel, August 1993. The change to Erbium is the driving factor in changing the above mentioned TS, because Erbium is not as effective as B_4C in holding down boron concentrations as seen by the results of the maximum critical boron concentration calculation.

The minimum SIT/RWSP boron concentration which will be sufficient to maintain the core at 1 percent shutdown, was conservatively calculated by licensee to be 2001.4 ppm. Consequently, any value of SIT concentration lower than 2001.4 ppm would result in the plant being less than 1 percent shutdown. The licensee has chosen the value of 2050 ppm as the TSs limit for further conservatism.

The proposed increase in boron concentration will not effect the results of the Mode 5 boron dilution event. Analysis by the licensee shows that for various combinations of K_{eff} , RCS conditions, and number of charging pumps in operation, the minimum possible time to criticality is greater than 90 minutes. For all other combinations of K_{eff} , RCS conditions and charging pumps, the same analysis shows that the time to loss of shutdown margin is greater than 55 minutes. This maintains the minimum of 55 minutes to criticality for the refueling mode boron dilution event analysis.

The proposed change to TS 3.9.1 continues to preserve the condition that during Mode 6 refueling operations, the more restrictive reactivity condition of either a K_{eff} of 0.95 or a boron concentration of 2050 ppm is met. The Core Operating Limits Report (COLR) Section 3.9.1 will also be revised by licensee to reflect the boron concentration change from 1720 ppm to 2050 ppm. The licensee proposed to revise the action statement in TS 3.9.1 to clarify the action requirements to restore boron concentration to within COLR limits. This change is consistent with the Standard Technical Specifications for CE plants.

No change is made to the boron concentration upper limit of 2300 ppm. This continues to ensure that there will not be an unacceptably high concentration of boric acid in the core resulting in precipitation during the long term cooling phase following a LOCA.

As discussed above, the staff has reviewed the licensee's proposed TS changes for Waterford 3 Fuel Cycle 9. Based on the staff's evaluation of the information provided by licensee, the staff approves the change in the boron concentration from 1720 to 2050 ppm for the SIT and the RWSP, and the change to the corresponding TS, because the change will make the boron concentration consistent with the safety analysis for the Waterford 3 Fuel Cycle 9 and it is shown to be 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 14461). 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.

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