Docket No. 50-382

Mr. Ross P. Barkhurst Vice President Operations Entergy Operations, Inc. Post Office Box B Killona, Louisiana 70066

Dear Mr. Barkhurst:

SUBJECT: ISSUANCE OF AMENDMENT NO. 66 TO FACILITY OPERATING LICENSE

NPF-38 - WATERFORD STEAM ELECTRIC STATION, UNIT 3 (TAC NO. 79629)

The Commission has issued the enclosed Amendment No. 66 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 January 24, 1991.

The amendment changes the Appendix A Technical Specifications by revising surveillance requirements to accurately reflect the design characteristics of the installed shutdown cooling system suction line isolation valves.

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:

L. Raynard Wharton, Acting Project Manager Project Directorate IV-1 Division of Reactor Projects III, IV, and V Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 66 to NPF-38

2. Safety Evaluation

cc w/enclosures: See next page

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

March 15, 1991

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L. Raynard Wharton, Acting Project Manager Project Directorate IV-1

Division of Reactor Projects III, IV, and V Office of Nuclear Reactor Regulation

Enclosures:

Amendment No. 66 to NPF-38

2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Ross P. Barkhurst Entergy Operations, Inc.

cc:

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Mr. Gerald W. Muench Vice President, Operations Support Entergy Operations, Inc. P. O. Box 31995 Jackson, Mississippi 39286

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Mr. Robert B. McGehee Wise, Carter, Child & Caraway P. O. Box 651 Jackson, Mississippi 39205

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Waterford 3

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Resident Inspector/Waterford NPS Arlington, Texas 76011 Post Office Box 822 Killona, Louisiana 70066

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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-382

WATERFORD STEAM ELECTRIC STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.66 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 January 24, 1991, 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. 66 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Theodore R. Quay, Director Project Directorate IV-1

Therder & Dury

Division of Reactor Projects III, IV, and V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: March 15, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 66

TO FACILITY OPERATING LICENSE NO. NPF-38

DOCKET NO. 50-382

Replace the following page of the Appendix A Technical Specifications with the attached page. The revised page is identified by Amendment number and contains a vertical line indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

REMOVE PAGE

INSERT PAGE

3/4 4-35

3/4 4-35

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

- 4.4.8.3.1 Each Shutdown Cooling System suction line relief valve shall be demonstrated OPERABLE:
 - a. By verifying that each valve in the suction path between the Reactor Coolant System and the shutdown cooling relief valve is open in the control room at least once per 12 hours.
 - b. At least every 30 months when tested pursuant to Specification 4.0.5.
- 4.4.8.3.2 The RCS vent(s) and all valves in the vent path shall be verified to be open at least once per 12 hours* when the vent(s) is being used for overpressure protection.

^{*}Except when the vent pathway is provided with a valve which is locked, sealed, or otherwise secured in the open position, then verify these valves open at least once per 31 days.

REACTOR COOLANT SYSTEM

3/4.4.9 STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.4.9 The structural integrity of ASME Code Class 1, 2, and 3 components shall be maintained in accordance with Specification 4.4.9.

APPLICABILITY: All MODES.

ACTION:

- a. With the structural integrity of any ASME Code Class 1 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature more than 70°F above the minimum temperature required by NDT considerations.
- b. With the structural integrity of any ASME Code Class 2 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature above 200°F, except during hydrostatic testing of components that are nonisolable from the Reactor Coolant System, then restore the structural integrity prior to increasing the Reactor Coolant System temperature more than 30°F above the minimum temperature required by NDT considerations.
- c. With the structural integrity of any ASME Code Class 3 component(s) not conforming to the above requirements, restore the structural integrity of the affected component to within its limit or isolate the affected component from service.
- d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.9 In addition to the requirements of Specification 4.0.5, each reactor coolant pump flywheel shall be inspected per the recommendations of Regulatory Position C.4.b of Regulatory Guide 1.14, Revision 1, August 1975.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 66 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 January 24, 1991, Entergy Operations, Inc. (the licensee) submitted a request for changes to the Waterford Steam Electric Station, Unit 3, Technical Specification (Appendix A). The requested changes would ensure that surveillance requirements accurately reflect the design characteristics of the installed Shutdown Cooling System (SDCS) suction line isolation valves. The current Technical Specification (TS) Surveillance Requirement 4.4.8.3.1.a requires that the Shutdown Cooling System suction line isolation valve be keylocked open in the control room at least once per 12 hours. The change would revise the surveillance test to require the isolation valve be verified open once per 12 hours. The staff's determination of no significant hazards consideration was published in the Federal Register on February 27, 1991, (56 FR 8221).

2.0 EVALUATION

The staff review of this issue has focused on the effect that the proposed change has on the ability to verify the SDCS suction line relief valves operability. The critical safety function served by these relief valves is to provide low temperature overpressure protection for the Reactor Coolant System (RCS) during heatup, cooldown, and during extended cold shutdown periods. The periodic valve lineup check imposed by the (TS) Surveillance Requirement 4.4.8.3.1.a ensures that the relief valves are not inadvertently isolated. We have reviewed the design characteristics of the shutdown isolation valves. Although the isolation valves are key-operated, they can only be locked closed, not locked open. This appears to be a conservative design condition because the ability to lock these valves closed provides assurance that the SDCS cannot be inadvertently placed into service. The ability to lock these valves open is undesirable because it would restrict system flexibility and the operators' ability to quickly isolate potential leaks.

3.0 EVALUATION

The current TS 4.4.8.3.1.a requires that suction isolation valves be verified to be key-locked open at least once per 12 hours. The intent of the requirement is to periodically verify proper alignment of the SDCS suction line relief valves by verifying open the suction isolation valves. Since the design configuration of the key-locked switch does not allow the key to be removed from the switch with valves in the open position, the staff agrees that the proposed revision to TS would accurately reflect the installed SDCS. The staff concludes that the proposed TS 4.4.8.3.1.a is acceptable.

4.0 EXIGENT CIRCUMSTANCES

The conflict with the TS, which would preclude shutdown operations as required for the refueling, was identified by the Senior Resident Inspector. The licensee's application for amendment dated January 24, 1991, requested issuance prior to the scheduled shutdown associated with the upcoming refueling outage. The licensee currently plans to enter Mode 4 on March 15, 1991, which will not allow the full 30 days for comments on the proposed action. A delay in issuing the amendment will, on the current refueling schedule, delay the licensee's ability to shutdown operations.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION

The Technical Specifications under which the facility was licensed did not take credit for key-locked open Shutdown Cooling System Isolation valves in any accident previously evaluated. All assumptions and results for previously evaluated accidents remain unchanged by the amendment. The license amendment does not cause an increase in the probability or consequence of any previously evaluated accident.

The amended surveillance requirement still prompts a valve lineup check once per 12 hours. This valve lineup provides the necessary high degree of confidence in the ability of the SDCS suction relief valves to protect the reactor vessel from low temperature overpressure transients. Therefore, the amended Technical Specification surveillance requirement does not create the possibility of a new or different kind of accident from any accident previously evaluated.

No credit has been taken in any accident evaluation for the ability to lock open the SDCS suction line isolation valves. Operations with the valves "open" instead of "key-locked open" provides an increased margin of safety by providing the operational flexibility needed for timely response to SDCS casualties and avoidance of potential loss of shutdown cooling scenarios. The amendment does not affect any assumptions or results of the safety analyses, diminish the protection provided by any limiting condition for operation, or affect any bases, therefore, it does not involve a reduction in the margin of safety.

6.0 CONTACT WITH STATE OFFICIAL

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.

7.0 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 in 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 (56 FR 8221). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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.

8.0 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: L. Raynard Wharton

Date: March 15, 1991