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Vice President, Operations
Waterford 3

W3F1-93-0324

A4.05

PR

December 23, 1993

Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
Technical Specification Change Request NPF-38-149

Gentlemen:

The attached description and safety analysis support the enclosed changes to the Waterford 3 Technical Specifications. These changes were identified in Generic Letter 93-05 "Line Item Technical Specifications Improvements To Reduce Surveillance Requirements For Testing During Power Operation."

The proposed change has been evaluated in accordance with 10CFR50.91(a)(1) using criteria in 10CFR50.92(c) and it has been determined that the proposed change involves no significant hazards considerations. The Plant Operating Review and Safety Review Committees have reviewed and accepted the proposed change based on the foregoing evaluation.

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ADD 1

Technical Specification Change Request NPF-38-149

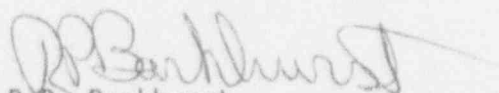
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Should you have any questions or comments concerning this request, please contact Paul Caropino at (504)739-6692.

Very truly yours,



R.P. Barkhurst

Vice President, Operations

Waterford 3

RPB/PLC/dc

Attachment:

Affidavit

NPF-38-149

cc:

J.L. Milhoan, NRC Region IV

D.L. Wigginton, NRC-NRR

R.B. McGehee

N.S. Reynolds

NRC Resident Inspectors Office

Administrator Radiation Protection Division

(State of Louisiana)

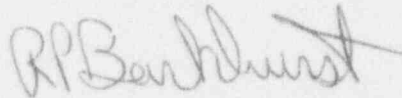
American Nuclear Insurers

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of)
)
Entergy Operations, Incorporated) Docket No. 50-382
Waterford 3 Steam Electric Station)

AFFIDAVIT

R.P. Barkhurst, being duly sworn, hereby deposes and says that he is Vice President Operations - Waterford 3 of Entergy Operations, Incorporated; that he is duly authorized to sign and file with the Nuclear Regulatory Commission the attached Technical Specification Change Request NPF-38-149; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information and belief.



R.P. Barkhurst
Vice President Operations - Waterford 3

STATE OF LOUISIANA)
) ss
PARISH OF ST. CHARLES)

Subscribed and sworn to before me, a Notary Public in and for the Parish and State above named this 23rd day of DECEMBER, 1993.



Notary Public

My Commission expires WITH LIFE.

DESCRIPTION AND SAFETY ANALYSIS
OF PROPOSED CHANGE NPF-38-149

The proposed change affects the following Technical Specification (TS) Surveillance Requirements:

- Radiation Monitoring Instrumentation Channel Functional Test TS Table 4.3-3
- Reactor Coolant System Pressure Isolation Valves TS 4.4.5.2.2.b
- Pressurizer Heaters TS 4.4.3.1.2 & 4.4.3.1.3
- Emergency Feedwater Pumps TS 4.7.1.2

Existing Specification

See Attachment A

Proposed Specification

See Attachment B

Background

The staff of the U.S. Nuclear Regulatory Commission has completed a comprehensive examination of surveillance requirements in technical specifications that require testing during power operation. This effort was part of the Technical Specification Improvement Program (TSIP). The results of this work were presented in NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements," December 1992. NUREG-1366 provided recommendations based on NRC findings. Generic Letter 93-05 was subsequently issued to provide guidance to licensees who plan to adopt applicable recommendations (line-item TS improvements).

The title and number of the following proposed line-item improvements corresponds to the section title and number in NUREG-1366 and associated Generic Letter 93-05. The proposed changes are compatible with plant operating experience and are consistent with the guidance provided by the NRC.

Description

5.14 Radiation Monitors (PWR, BWR)

Technical Specification Surveillance Requirement 4.3.3.1 requires each radiation monitoring instrumentation channel to be demonstrated operable by the performance of a channel check, channel calibration, and channel functional test at the frequency shown in Table 4.3-3.

As a result of the findings identified in NUREG-1366 the staff concluded that in order to decrease licensee burden and increase the availability of radiation monitors, the channel functional test should be change from monthly to quarterly. An evaluation has determined that this NRC recommendation is compatible with the Waterford 3 plant operating experience.

Therefore, this proposed TS change modifies Table 4.3-3 "Radiation Monitoring Instrumentation Surveillance Requirements" by replacing the M (monthly), with a Q (Quarterly) under Channel Functional Test, in verbatim compliance with Generic Letter 93-05.

6.1 Reactor Coolant System Isolation Valves (PWR)

Technical Specification 4.4.5.2.2.b requires that reactor coolant system isolation valves be tested prior to entering Mode 2 whenever the plant has been in cold shutdown for 72 hours or more and if leakage testing has not been performed in the previous 9 months.

As described in NUREG-1366 this surveillance has a potential for causing problems resulting from a hurried recovery. In addition, extending the surveillance test interval does not significantly alter the associated risk. The staff concludes by recommending an increase in the 72 hour time (for remaining in cold shutdown without leak testing the RCS isolation valves) to 7 days. An evaluation has determined that this NRC recommendation is compatible with the Waterford 3 plant operating experience.

Therefore, this proposed change replaces "72 hours" with "7 days" in TS 4.4.5.2.2.b in verbatim compliance with Generic Letter 93-05.

6.6 Pressurizer heaters (PWR)

Technical Specification 4.4.3.1.2 requires the capacity of each of the required groups of pressurizer heaters to be verified to be at least 150 kW at least once per 92 days. Technical Specification 4.4.3.1.3 requires the emergency power supply for the pressurizer heaters to be demonstrated operable at least once per 18 months.

As a result of the findings in NUREG-1366 the staff provided the following recommendation: The capacity of pressurizer heaters should be tested once each refueling interval for those plants without dedicated safety-related heaters. The capacity of pressurizer heaters should be tested every 92 days for plants with dedicated safety-related heaters. For those PWRs which have pressurizer heaters tied to a vital bus, no testing of switching between power supplies should be required.

Waterford 3 does not have dedicated safety-related pressurizer heaters. Therefore, this proposed change modifies TS 4.4.3.1.2 by replacing "per 92 days" with "each refueling interval" in accordance with Generic Letter 93-05. An evaluation has determined that this NRC recommendation is compatible with the Waterford 3 plant operating experience.

A redundant group of pressurizer proportional heaters and three redundant groups of backup heaters are available to be placed manually on the emergency diesel generator after a loss of offsite power. The heaters are powered from the 480V non-safety switchgear buses 3A32 and 3B32. Safety related Class 1E breakers provide power to these buses from the 4.16kV Engineered Safety Feature buses 3A3-S and 3B3-S. Therefore, TS Surveillance 4.4.3.1.3 will continue to be performed. An administrative change has been incorporated in this TS by replacing "at least once per 18 months" with "at each refueling interval."

9.1 Auxiliary Feedwater Pump and System Testing (PWR)

The Waterford 3 auxiliary feedwater (AFW) pumps are referred to as emergency feedwater (EFW) pumps and addressed in TS 4.7.1.2. This Surveillance requires testing each pump on a staggered test bases once per 31 days.

As a result of the findings identified in NUREG-1366 the staff concluded that the frequency of AFW (EFW) pumps should be changed to quarterly on a staggered test bases. An evaluation has determined that this staff recommendation is compatible with the Waterford 3 plant operating experience.

Therefore, this proposed TS change modifies TS Surveillance Requirement 4.7.1.2 consistent with that appearing in Generic Letter 93-05. The proposed change is slightly different than that appearing in the Generic Letter because the current Waterford 3 TS deviate from the Combustion Engineering Standard Technical Specifications by omitting verification of flow rate. This is due to an orifice in the pump recirculation lines which controls flow such that it is not subject to variation. This requirement was removed prior to the original TS issuance. The proposed change increases the pump testing interval

from 31 to 92 days and reformat TS 4.7.1.2 as follows: item a.2 is a.1; item a.1 is b.1 and b.2; item b is c and item c is d.

Safety Analysis

The proposed change described above shall be deemed to involve a significant hazards consideration if there is a positive finding in any of the following areas:

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed change to increase the radiation monitoring instrumentation channel functional test from monthly to quarterly will have no effect on design basis accidents. The findings in NUREG-1366 determined that this change will increase the availability of radiation monitors.

The proposed change to increase the 72 hour time for remaining in cold shutdown without leak testing the RCS isolation valves to 7 days will not affect any design basis accidents. NUREG-1366 findings have determined that extending this interval does not significantly alter the associated risk. In addition, the current requirement has a potential for causing problems resulting from a hurried recovery.

The proposed change to the pressurizer heater capacity test interval from quarterly to each refueling interval will have no effect on any design basis accidents. The TS requires at least 2 groups of pressurizer heaters each having a nominal capacity of 150 kW. Waterford 3 has 8 groups of pressurizer heaters; two proportional groups of 150 kW each, and 6 backup groups of 200 kW each. An evaluation of past operating experience has shown the availability of at least 6 groups of pressurizer heaters with a minimum of 150 kW each.

The proposed change to extend the testing interval for the EFW pumps will have no effect on any design basis accidents. The pumps will continue to be tested quarterly to the same standards applied to safety related pumps as defined by the ASME Section XI Code. Satisfactory completion of testing in accordance with the Code is accepted as verification that safety related pumps will be available to perform their intended function.

The proposed changes identified above are supported by the findings identified in NUREG-1366 and consistent with the guidance provided in Generic Letter 93-05. These line-item improvements are intended to improve plant safety, decrease equipment degradation, and remove unnecessary burden on personnel resources by reducing the amount of testing that the TS require during power operation. Therefore, the proposed changes identified above will not involve a significant increase in the probability or consequences of any accident previously evaluated.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different type of accident from any accident previously evaluated?

Response: No.

The changes identified above only affect the frequency of surveillance testing. There are no changes that will alter operation of the plant or the manner in which it is operated. Therefore, the proposed changes will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed changes identified herein extend testing frequency in an effort to improve plant reliability and safety. The proposed changes are consistent with the findings in NUREG-1366, guidance in Generic Letter 93-05 and plant operating experience. As such the proposed changes will preserve the established margin of safety for the affected specifications. Therefore, the proposed changes will not involve a significant reduction in a margin of safety.

Safety and Significant Hazards Determination

Based on the above safety analysis, it is concluded that: (1) the proposed change does not constitute a significant hazards consideration as defined by 10 CF 50.92; and (2) there is a reasonable assurance that the health and safety of the public will not be endangered by the proposed change; and (3) this action will not result in a condition which significantly alters the impact of the station on the environment as described in the NRC final environmental statement.

NPF-38-149

ATTACHMENT A