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Operators 5

W3F1-93-0034 A4.05 PR

May 7, 1993

U.S. Nuclear Regulatory Commission Attr: Document Control Desk Washington, D.C. 20555

Subject:

Waterford 3 SES Docket No. 50-382 License No. NPF-38

Technical Specification Change Request NPF-38-135

#### Gentlemen:

The attached description and safety analysis support a change to the Waterford 3 Technical Specifications. This proposal requests a one-time exemption to Specification 4.6.1.2.a, which requires three Type A Containment Integrated Leakage Rate Tests to be performed at 40  $\pm$  10 month intervals during each 10-year service period. This one-time exemption would allow the third test of the first 10-year service period to be performed during Refuel 7 at approximately a 54 month interval instead of the current maximum interval of 50 months. This amendment application supplements our request for exemption to 10 CFR Part 50 Appendix J Section III.D.1(a) submitted via W3F1-93-0041 dated May 7, 1993.

This proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1), using the criteria in 10 CFR 50.92(c) and it has been determined that this request involves no significant hazards consideration.

We respectfully request a timely review due to the potential impact on our refueling outage schedule. Refuel 6 is currently projected to begin on March 18, 1994. The attached proposed change is similar to a change recently approved by the NRC for the Callaway Plant, Unit 1, Facility Operating License No. NPF-30.

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Technical Specification Change Request NPF-38-135 W3F1-93-0034 Page 2 May 7, 1993

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

Very truly yours,

R.P. Barkhurst

Vice President, Operations

Waterford 3

RPB/PLC/dc

Affidavit Attachment:

NPF-38-135

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 Waterford 3 Steam Electric Station	) Docket No. 50-382

### AFFIDAVIT

R.P. Barkhurst, being duly sworn, hereby decoses 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-38-135; 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. Bar hurst 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 \_\_\_\_\_ day of \_\_\_\_\_\_\_, 1993.

Notary Public

# DESCRIPTION AND SAFETY ANALYSIS OF PROPOSED CHANGE NPF-38-135

The proposed change requests a one-time schedular exemption to Technical Specification (TS) Surveillance Requirement 4.6.1.2.a and its associated Bases, that requires three Type A (Containment Integrated Leakage Rate Tests) CILRT be performed at  $40 \pm 10$  month intervals during each 10-year service period. This one-time exemption would allow the third test of the first 10-year service period to be performed during Refuel 7 at approximately a 54 month interval instead of the current maximum interval of 50 months.

Existing Specifications

See Attachment A

Proposed Specifications

See Attachment B

Type A tests are defined in 10 CFR Part 50 Appendix J Section II.F as "tests intended to measure the primary reactor containment overall integrated leakage rate (1) after the containment has been completed and is ready for operation, and (2) at periodic intervals thereafter." The periodic retest schedule for Type A tests is prescribed by 10 CFR Part 50 Appendix J Section III.D.1(a) "After the preoperational leakage rate tests, a set of three Type A tests shall be performed, at approximately equal intervals during each 10-year service period. The third tests of each set shall be conducted when the plant is shutdown for the 10-year plant inservice inspections."

TS 4.6.1.2.a requires that three Type A test be conducted at 40  $\pm$  10 month intervals. This Surveillance incorporates the requirements of Appendix J Section III.D.1(a). The time required to perform the CILRTs necessitates that they be performed during refueling outages. The time interval between CILRTs should be about 40 months based on performing three such tests at approximately equal intervals during each 10-year service period. Since refueling outages do not necessarily occur coincident with a 40 month interval, a permissible variation of 10 months (i.e., a 25 percent variation) is authorized in the TS to permit flexibility in scheduling.

Per ASME Section XI IWA-2400(a), the 10-year service period begins with the inservice date . The first and second CILRTs of the first 10-year service period for Waterford 3, were conducted in May 1988 and May 1991 respectively. This represents testing intervals of 32 and 36 months based on an inservice date of September 1985. This would indicate that the third of the first set of three CILRTs be performed during Refuel 6 (scheduled for March 1994) which will be 34 months after the preceding test. However, this would not meet the TS and CFR requirement to perform the third CILRT during shutdown for the 10-year inservice inspection interval. ASME Section XI IWA-2400(c) allows the 10-year inspection interval to be decreased or extended by as much as one year. Thus, performing the third CILRT during Refuel 6 would not meet this criteria while the Refuel 7 projected start date of October 1995 is well within these bounds. In order to comply with the 40  $\pm$  10 month criteria and CFR requirements Waterford 3 would be forced to perform an extra CILRT within the first 10-year service period.

To avoid performing this fourth CILRT, we are proposing that the third CILRT for the first 10-year service period be performed in November 1995 during Refuel 7. This will allow compliance with all other criteria and represents a one-time extension of approximately four months beyond the maximum permitted CILRT test interval.

The benefit of not performing an additional CILRT is a reduction in personnel radiation exposure. A dose savings will be realized from eliminating contamination, reducing exposure for venting and draining, and from setup and restoration of instrumentation required to perform the test. The NRC has previously approved a similar amendment request as indicated in NRR Safety Evaluation related to Amendment 77 to Facility Operating License No. NPF-30, Callaway Plant Unit 1, dated February 22, 1993.

Data from the first (May 1988) and second (May 1991) CILRTs at Waterford 3 indicates that most of the measured leakage is from the containment penetrations and not from the containment barrier. Penetration and valve leakage is measured by the performance of Type B and C tests (Local Leakage Rate Test or LLRT). The LLRT program is not altered by this request, therefore, containment integrity will continue to be verified by LLRTs. In addition, the data from the previous CILRTs illustrates that the "as-left" leakage rate was well below the acceptance limits established in 10 CFR Part 50 Appendix J. and Technical Specifications. The allowable leakage rate, L., is 0.5 wt. %/day, however, Appendix J and TS require that the leakage rate be less than 75% of L to allow for deterioration in leakage paths between tests. Therefore, the acceptance limit is <0.375 wt. %/day. The "as left" leakage rates for the first two CILRTs were 0.116 and 0.0731 wt. %/day which is well below the acceptance limit. Additionally, there have been no modifications made to the containment structure since the last CILRT that could adversely affect the test results.

## 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:

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

Response: No.

This one-time exemption to extend the CILRT interval approximately four months beyond the maximum TS allowance within the first 10-year service period will not adversely impact plant safety. The majority of leakage from the containment is through penetrations and isolation valves. The schedule for performing the Type B and C LLRTs is not affected. The allowable containment leakage used in accident analysis for offsite doses is L., 0.5 wt. %/day. For conservatism the leakage is limited to 75% of L. to account for possible degradation of the containment leakage barriers between tests.

Based on the leaktight integrity of the containment, as demonstrated by previous CILRT test results, the additional time period added to the third testing interval will not adversely impact the containment leakage barriers to a point where degradation would cause leakage to exceed that assumed in accident analysis.

Therefore, the proposed change will not involve a significant increase in the probability or consequences of any accident

previously evaluated.

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

There are no design changes being made that would create a new type of accident or malfunction. The proposed change will not alter the plant or the manner in which it is operated. The change proposes a one-time exemption to extend the time interval for performing the third CILRT. The purpose of the CILRT is to provide periodic verification by test of the leaktight integrity of the primary reactor containment, and systems and components which penetrate containment. The tests assure that leakage through containment, and systems and components penetrating containment will not exceed the allowable leakage rate values associated with conditions resulting from a loss-of-coolant accident. The additional time period added to the third CILRT interval will not adversely affect the containment integrity in the event of a loss-of-coolant accident. Therefore, the proposed change will not create the possibility of a new or different type 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 change is a one-time request to extend a surveillance interval and does not reduce, the margin of safety assumed in accident analysis for release of radioactive materials from the containment atmosphere into the environment, or any margin of safety preserved by the Technical Specifications. Therefore, the proposed change will not involve a significant reduction in a margin of safety.

"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 CFR 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."