Entergy Operations, Inc.

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R. P. Barkhurst Vice Present Operators Waterline 3

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January 28, 1993

Entergy

Operations

U.S. Nuclear Regulatory Commission ATTN: Document Control Deck Washington, D.C. 20555

Subject: Waterford 3 SES Docket No. 50-382 License No. NPF-38 Technical Specification Change Request NPF-38-114 Request for Additional Information

Gentlemen:

By application dated May 8, 1991 and supplemented by letter dated March 6, 1992, Entergy Operations, Incorporated proposed modifications to the Waterford 3 Technical Specifications (TS) 3/4.8.1, A.C. Sources. This submittal requests that the previous information concerning the minimum volume of stored diesel fuel oil (i.e. TS 3.8.1.1(b2) and 3.8.1.2(b2)) be disregarded in favor of the proposed change described herein.

As indicated in the attached Safety Analysis, this proposed change does not involve a significant hazards consideration as defined by 10CFR 50.92.

If there are any questions or comments, please contact P.L. Caropino at (504) 739-6692.

Very truly yours,

BBar

R.P. Barkhurst Vice President, Operations Waterford 3

RPB/PLC/dc Attachment: Affidavit NPF-38-114

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

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## 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 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-38-114; 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.

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R.P. Barkhurst Vice President Operations - Waterford 3

STATE OF LOUISIANA

PARISH OF ST. CHARLES

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Subscribed and sworn to before me, a Notary Public in and for the Parish and State above named this 28" day of JANUART , 1992.

Notary Public

My commission expires with LIFE

This proposed TS change modifies Technical Specification Change Request NPF-38-114 by including an additional provision in TS 3.8.1.1(b) and 3.8.1.2(b). In addition the associated bases has been revised to describe the basis for the Waterford 3 stored diesel fuel oil minimum volume requirements.

Existing Specification

See Attachment A

Proposed Specification

See Attachment B

Description

An additional provision has been incorporated into TS 3.8.1.1(b) and 3.8.1.2(b) as indicated on Attachment B. This new provision will allow stored diesel fuel oil to be at a volume below the current specified minimum volume of 38,760 gallons for a period not to exceed five days provided that a fuel volume of greater than 38,000 gallons is maintained.

The guidance given by Regulatory Guide 1.137 and Standard Review Plan Section 9.5.4, "Emergency Diesel Engine Fuel Oil Storage and Transfer System," states that a minimum seven-day fuel oil supply is required to be on-site to meet the engineered safety feature loads following a loss of offsite power and a design basis accident. Current TS 3.8.1.1 and 3.8.1.2 specify that a separate main fuel oil storage tank containing a minimum of 38,760 gallors of fuel shall be available for each emergency diesel generator (EDG).

An engineering calculation which documents the design basis fuel consumption supports the current TS volume as sufficient to operate the EDG for seven days based on a time dependent load scheme assuming only one EDG is operating and only one storage tank available.

The Diese; Fuel Oil Storage and Transfer System provides adequate storage of diesel fuel oil and supplies it to the two emergency diesel engines. Diesel fuel oil storage for each diesel engine is separate and independent of each other. Two completely redundant trains are provided, each consisting of a diesel oil storage tank, transfor pump, diesel oil feed tank, interconnecting piping, valves and instrumentation and controls.

TS 3.8.1.1(b) and 3.8.1.2(b) have been modified to include an additional provision, which if approved will accommodate a condition when the 7 day fuel oil supply for an EDG is not available (based on the conservative assumption of only one tank being available). However, this condition is restricted to

fuel volume reductions which maintain at least a 5 day fuel oil supply (based on full load conditions and again considering only one tank available) for a period not to exceed 5 days.

The new provision is considered appropriate to address circumstances or events such as full load operation required after an inadvertent start while at minimum required fuel oil volume; or feed and bleed operations, which may be necessitated by increased particulate levels; or extended testing under full load conditions. The new provision allows sufficient time to obtain the requisite replacement fuel oil and perform the required analysis prior to adding fuel oil to the tank. A period of 5 days will be allowed to complete restoration of the required level prior to declaring the EDG inoperable. This period is acceptable based on the remaining capacity (i.e. greater then 38,000 gallons which equates to a supply of greater than 5 days at full load, assuming single tank availability), the fact that procedures will be initiated to obtain replenishment, and the low probability of an event during this brief period.

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

Response: No

Previously analyzed accidents that are potentially affected by this change are those that postulate the loss of offsite power concurrent with a design basis accident (e.g., Loss or Coolant Accident LOCA or Main Steamline Break MSLB). To significantly increase the probability or consequence of such an accident, this change would have to negatively impact the reliability or performance of the EDGs.

Under the proposed change an EDG would be operable with a fuel oil volume less than the 7 day time dependent volume of 38,760 gallons, for a period up to 5 days. This period is acceptable based on the supply of fuel oil in the redundant storage tank associated the other EDG, the remaining capacity of 5 days at full load (i.e. 38,000 gallons), the fact that procedures will be initiated to obtain replenishment, and the low probability of an event during this period.

in addition if a single EDG had to be run continuously from a single storage tank, there are several sources of diesel oil supplies within the area.

Waterford 3 currently has a purchase agreement with a local supplier that provides delivery approximately twenty-four hours from the time of request. It is improbable that additional fuel oil could not be secured and delivered within five days, even under the most severe weather conditions. Primarily, diesel oil is brought in by truck. Under extremely unfavorable environmental conditions, it is possible to deliver the diesel oil by railroad or river barge. As such, interruption of EDG operation following a limiting design basis event or accident is highly unlikely. The reliability and performance of the EDGs are unaffected by the change. Therefore, the proposed change 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 kind of accident from any accident previously evaluated?

Response: No

The proposed change will recognize a condition when iess than a 7 day EDG fuel oil supply may occur, provided that a 5 day supply is maintained and fuel is replenished to the 7 day volume within 5 days. It does not change any existing EDG system components or the control/alarm logic. The proposed change does not introduce any new components or system control/alarm logic, nor will it undermine the capability to obtain additional fuel supplies in a timely manner.

Based on the above, this change will not introduce a new failure path and consequently, will not create new unevaluated sequence of events. Therefore, the proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response: No

The change will allow substituting the 7 day fuel oil supply for a 5 day fuel oil supply provided fuel is replenished within 5 days. This does not impact the availability of the EDGs following any limiting design basis event or accident since the 5 day reserve provides adequate time for local suppliers to replenish fuel without interrupting operation of the diesels.

The reposed amendment does not affect any design related issues or the performance of the system. All technical content of the safety analyses are retained and no analysis-based safety margins are significantly affected. There are no changes to the physical design of the plant. Therefore, the proposed change will not involve a significant reduction in the 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 10CFR 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.