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U.S. 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-38-127

Gentlemen:

The attached description and safety analysis supports a modification to the Waterford 3 Technical Specifications. The change affects the Radiation Monitoring Instrumentation of Table 3.3-6 by providing distinction between the Component Cooling Water radiation monitors and altering the applicability and action statement associated with these monitors.

As discussed in the attachment Entergy Operations, Incorporated feels that these site specific changes will clarify the specified requirements and preclude difficulties currently experienced by plant personnel.

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

Very truly yours,

RPBarkhurst

R.P. Barkhurst
Vice President, Operations Waterford 3

RPB/PLC/dc
Attachment: Affidavit
NPF-38-127
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	)	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-38-127; 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.

RPBarkhurst

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 21ST day of OCTOBER, 1992.

Stan E Fabre

Notary Public

My Commission expires WITH LIFE.

DESCRIPTION AND SAFETY ANALYSIS
OF PROPOSED CHANGE NPF-38-127

Technical Specification 3/4.3.3 "Radiation Monitoring Instrumentation" prescribes the operability requirements for the radiation monitoring instruments shown on Table 3.3-6. Items 2d and 2e of this table provide the specified limits for three Component Cooling Water System (CCWS) radiation monitoring instrumentation channels. In order to easily distinguish the instrument monitors, items 2d and 2e have been revised to indicate "Monitors A & B" and "Monitor A/B" respectively. The applicability requirement for item 2e (Monitor A/B) has been changed from All MODES to MODES 1 through 4 due to operational difficulties as a result of reduced CCW flow. Identical changes have been made to Table 4.3-3 "Radiation Monitoring Instrumentation Surveillance Requirements". In addition action statement number 28 was modified to include the Special Report criteria of Specification 6.9.2.

Existing Specification

See Attachment A

Proposed Specification

See Attachment B

Background

This proposed technical specification (TS) change was prompted by the following (1) Periodic difficulty in ascertaining what CCW monitors the specified requirements apply to due to the inadequate instrument description in the TS, and (2) Operational difficulties associated with CCW monitor A/B. This instrument monitors CCW on the return line from containment. During refueling this line is isolated at the containment to facilitate refueling activities. The flow in the CCW return line is reduced during this mode such that the differential pressure across the monitor sample line tap is insufficient to create an adequate sample flow. This results in having to declare the monitor inoperable and enter the associated action which requires sampling and analysis. On September 24, 1992, an eight hour sample was missed resulting in LER 92-011. The following description and safety analysis justify relaxing the operability requirements for CCW radiation monitor A/B. In addition, Table 3.3-6 ACTION STATEMENT 28 was observed to be incomplete and therefore modified to provide clarification.

Description

The CCWS is a closed loop cooling water system that supplies cooling to plant systems and components. During normal, shutdown, and refueling operating conditions two operating CCW pumps are connected on the pump suction and discharge, to common headers serving safety and non-safety equipment by means of essential, non-essential, and non-essential non-seismic loops. Each loop services specified equipment and radiation monitoring is provided to detect leakage into the system from components that may contain radioactivity. A continuously operating radiation monitor is provided in each of the redundant headers on the discharge side of the CCW pumps. These monitors (CCW Monitor A and CCW Monitor B) are the safety related instruments specified on Table 3.3-6 item 2d. A third non-safety related monitor is provided on the return line from containment in the nonessential seismically qualified loop. This instrument (item 2e CCW Monitor A/B) monitors the cooling water from the components inside the containment (i.e., the four reactor coolant pump seals and motor control element drive mechanism (CEDM) coolers).

The purpose of this radiation monitor is to provide early detection of Reactor Coolant System (RCS) leakage from the Reactor Coolant Pump (RCP) seals The current specification requires this monitor to be operable during ALL MODES of operation. Waterford 3 proposes to revise this requirement to exclude Mode 5 Cold Shutdown and Mode 6 Refueling, due to reduced RCS pressure and reduced CCW flow. In mode 5 reactor coolant pressure is far lower, resulting in lower stresses and reduced potential for RCP seal leakage. In Mode 6 CCW flow through the non-essential seismically qualified loop is reduced and isolated at the containment to facilitate refueling operations (i.e., CEDM disassembly and containment isolation valve testing). The reduced flow does not allow for maintaining a continuous fluid sample for CCW monitor A/B and poses operability problems. While it is possible that the RCP seals could leak during Mode 5 depressurization, any leakage would still be identified by the two continuous CCW radiation monitors A and B.
In addition component cooling water pressure and temperature is monitored at each of the reactor coolant pump seal water outlets. A high temperature or pressure signal annunciates an alarm in the control room with high temperature actuating automatic isolation of the affected RCP seal cooler.

Based on the above, we feel that relaxing the applicability requirements for CCW monitor A/B is justified and will pose no threat to safety.

Table 3.3-6 ACTION STATEMENT number 28 states "With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirements, operation of the plant may continue for up to 30 days provided grab samples are taken once per 8 hours and

these samples are analyzed for gross activity within 24 hours." This action statement applies to the three CCW monitors described earlier and item 2C Steam Generator Blowdown (SBG) Monitor. Action 28 was evaluated and determined to be incomplete as there is no direction provided should operability not be restored within 30 days. Therefore, action 28 was modified to include the following statement: "If the monitor is not restored to OPERABLE status within 30 days after the failure, continue sampling and prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status". Imposing the special report criteria of 6.9.2 is similar to other radiation monitor remedial action requirements such as those required by Generic Letter 83-37, "NUREG 0737 - Technical Specifications." The special report will ensure that in the unlikely event that these monitors are out of service beyond 30 days a schedule for returning the monitor to service will be established and submitted to the staff. The CCW and SGB radiation monitors are process monitors that serve a primary function to provide for early detection of radioactivity leakage into normally nonradioactive systems, including primary-to-secondary leakage. These monitors are not effluent monitors and serve no isolation function but rather perform a surveillance function. Therefore, continuation of the alternate sampling technique is appropriate and consistent with similar specified requirements.

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 any accident previously evaluated?

   Response: No.

   Removing the operability requirements for modes 5 and 6 from CCW radiation monitor A/B will have no affect on accidents previously evaluated. The purpose of the monitor is to detect RCS leakage from the RCP seals. Early detection of RCP seal leakage is provided by monitoring CCW pressure and temperature at each RCP seal cooler water outlet. A high temperature or pressure signal will cause an alarm in the control room and high temperature also actuates automatic isolation of the affected RCP seal cooler. In addition, radiation detection will continue to be performed by CCW radiation monitors A and B.

The clarification of ACTION 28 has no affect on accidents previously evaluated. The current TS requires grab samples to be taken once per eight hours and analyzed for gross activity within 24 hours should one of the affected instrumentation monitoring channels OPERABLE be less than required. Adding the Special Report criteria of 6.9.2 is consistent with the guidelines provide for other process monitors in Generic Letter 83-37, "NUREG-0737 - Technical Specifications."

Adding "Monitors A and B" to item 2d and "Monitor A/B" to item 2e is purely administrative in nature and is intended to clarify the specifications.

The radiation monitors affected by this proposed change are designed to provide early detection of radioactive leakage into normally nonradioactive systems. These monitors do not serve to isolate and prevent a radioactive release to an unprotected area. No design basis accidents are affected by these changes. 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 does not introduce any new or different equipment and it will not result in installed equipment being operated in a new or different manner. The change will allow one less CCW monitor during cold shutdown and refueling modes due to reduced RCS pressure and CCW flow while maintaining system integrity with two continuous radiation monitoring instruments. Adding the Special Report criteria to ACTION 28 completes this action statement in a manner similar to other requirements associated with process radiation monitors. Adding "Monitors A and B" to item 2d and "Monitor A/B" to item 2e is purely administrative in nature and is intended to clarify the specifications. 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 the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change completes ACTION 28 by allowing continued plant operation beyond 30 days provided the Special Report criteria of 6.9.2 is complied with. The change will have no adverse impact on the protective boundaries, safety limits or margin of safety. The margin of safety associated with CCW radiation monitors and RCP seal leakage is established in FSAR Subsection 5.2.5.1.5. This analysis only takes credit for safety related CCW radiation monitors A and B and does not take credit for CCW radiation monitor A/B. Adding "Monitors A and B" to item 2d and "Monitor A/B" to item 2e is purely administrative in nature and is intended to clarify the specifications. Therefore, the proposed change will not involve a significant reduction in a margin of safety.

The Commission has provided guidance concerning the application of standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve significant hazards considerations. The changes identified in this submittal closely match example (i).

(i) A purely administrative change to technical specifications (i.e., a change to achieve consistency throughout the technical specifications correction of an error, or a change in nomenclature);

Although the proposed change includes a relaxed applicability requirement, we feel the change clearly accounts for plant conditions not previously considered and therefore is administrative in nature.

Safety and Significant Hazards Determination

Based on the above Safety Analysis, it is concluded that: (1) the proposed changes do 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 changes; and (3) this action will not result in a condition that significantly alters the impact of the station on the environment as described in the NRC Final Environmental Statement.