

From: Kalyanam, Kaly
Sent: Thursday, January 12, 2012 3:07 PM
To: STEELMAN, WILLIAM J
Subject: FW: Request for Supplemental Information to complete the Acceptance Review

I am resending it because the "from"/"to" names were mixed up.

Sorry about it.

Kaly

To: W. Steelman

From: N Kalyanam

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 – SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING ACTION RE: LICENSE AMENDMENT REQUEST TO ADOPT NFPA 805 PERFORMANCE-BASED STANDARD FOR FIRE PROTECTION FOR LIGHT WATER REACTOR GENERATING PLANTS (2001 EDITION) (TAC NO. ME7602)

By letter dated November 17, 2011, Entergy Operations Inc. (Entergy, the licensee), submitted a license amendment request (LAR) requesting U.S. Nuclear Regulatory Commission (NRC) review and approval to change the plant fire protection program to one based on the National Fire Protection Association (NFPA) standard NFPA 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants," 2001 Edition, as incorporated into Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.48(c), "Fire Protection."

Consistent with 10 CFR 50.90, an amendment to the license (including the technical specifications) must fully describe the changes requested, and following as far as applicable, the form prescribed for original applications. 10 CFR 50.34 addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review was also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

The information requested and associated time frame were discussed with you and Mr. S. Bennett, et.al., of your staff on January 12, 2012.

In order to make the application complete, the NRC staff requests that Entergy supplement the application to address the questions identified below. This will enable the NRC staff to begin its detailed technical review. In the January 12, 2012, conference call, the licensee had committed

to provide, "within one to two working days," the date by when the supplement (response to these questions) will be communicated to the NRC staff. The NRC staff is providing the questions in this email and will confirm the committed supplement date through a later correspondence.

If you have any questions, please contact me at (301) 415-1480.

N. Kalyanam, Project Manager

Docket No. 50-382

SUPPLEMENTAL INFORMATION NEEDED
RELIEF REQUEST FOR LICENSE AMENDMENT REQUEST
ENTERGY OPERATIONS INC.
WATERFORD STEAM ELECTRIC STATION, UNIT 3

1. A fire Probabilistic Risk Assessment (PRA), including the methods used in the base PRA, must have been peer reviewed to support an LAR. The NRC staff requests the LAR be supplemented confirming that the peer review was sufficient in that any enhancements subsequent to the peer review or ongoing enhancements to reduce Core Damage Frequency (CDF) and Large Early Release Frequency (LERF) involved the review of fire impacts on component failures for important fire scenarios and were performed within the methodology reviewed by the peer review team.
2. An acceptable LAR should include Table V-2: the "not-met" and CC-I SRs for fires. Please provide this Table.
3. The LAR identifies five deviations from currently reviewed methods such as those in NUREG/6850 and the Frequently Asked Question (FAQs). The NRC staff has agreed that unreviewed methods may be included in current submittals if accompanied by a sensitivity study. The LAR provides sensitivity studies on each of the five but the synergistic effects are not explored. Rather than try to identify relevant combinations, it would be simplest to provide an estimate of the changes in CDF and LERF where all five deviations are simultaneously replaced with currently reviewed methods.
4. Waterford 3's increase in CDF is estimated to be greater than 10^{-6} /yr. According to Regulatory Guide (RG) 1.174, the NRC staff needs an estimate of the total risk from all hazards, e.g., seismic and external flooding to review the acceptability of this result. The licensee's estimate of the total risk should be provided.
5. Appendix M in the submittal states:

“The licensee shall implement the following modifications to its facility to complete the transition to full compliance with 10 CFR 50.48(c) by _____. [INSERT DATE. To be based on Attachment S].”

There are no “following modifications” listed. The licensee should clarify what modifications are planned.