



**Entergy Operations, Inc.**  
17265 River Road  
Killona, LA 70057-3093  
Tel 504 739 6660  
Fax 504 739 6678  
Djacob2@entergy.com

**Donna Jacobs**  
Vice President, Operations  
Waterford 3

W3F1-2012-0095

November 26, 2012

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Subject: Response to a Request for Additional Information Regarding  
License Amendment Request to Relocate Technical Specifications  
to the Technical Requirements Manual  
Waterford Steam Electric Station, Unit 3 (Waterford 3)  
Docket No. 50-382  
License No. NPF-38

Dear Sir or Madam:

In Email request from N. Kalyanam to M. Mason (ADAMS Accession Number ML12310A458), Waterford 3 received a request for additional information regarding its license amendment request to relocate Technical Specification 3.7.5, Flood Protection, to the Technical Requirements Manual. Please find attached the additional information requested.

There are no commitments associated with this submittal. Should you have any questions or comments concerning this submittal, please contact Michael E. Mason, acting Licensing Manager, at (504) 739-6673.

I declare under penalty of perjury that the foregoing is true and correct. Executed on November 26, 2012.

Sincerely,

  
for  
Donna Jacobs

DJ/WH

Attachment: Response to NRC Request for Additional Information

cc: Mr. Elmo E. Collins, Jr., Regional Administrator  
U.S. NRC, Region IV  
RidsRgn4MailCenter@nrc.gov

U.S. NRC Program Manager for Waterford 3  
Kaly.Kalyanam@nrc.gov

U.S. NRC Senior Resident Inspector for Waterford 3  
Marlone.Davis@nrc.gov

Louisiana Department of Environmental Quality  
Office of Environmental Compliance, Surveillance Division  
Ji.Wiley@LA.gov

**Attachment to**

**W3F1-2012-0095**

**Response to NRC Request for Additional Information**

Response to NRC Request for Additional Information (RAI)

RAI 1

By letter dated [November] 21, 2011 (ADAMS Accession No. ML11326A283), Entergy Operations Inc. submitted a License Amendment Request (LAR) to Relocate the following Technical Specifications (TSs) to the Technical Requirements Manual:

- TS 3.4.6 (Chemistry)
- TS 3.7.5 (Flood Protection)
- TS 3.7.9 (Sealed Source Contamination)
- TS 3.9.5 (Communications)

On reviewing the Technical Analysis for the relocation of TS 3.7.5, the NRC staff requests additional information as stated below, on or before November 16, 2012.

The application mentions a non-conservatism related to flooding but has not identified what it is. It has also not provided the language to be put into the TRM concerning flooding. The staff has 2 comments as explained below:

The statements below are from the amendment application:

1. Criterion 2. Criterion 2 refers to a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of, or presents a challenge to, the integrity of a fission product barrier. The "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (58FR39132) defines the design basis accident or transients as that contained in the UFSAR Chapter 6 and 15. The flood related events are contained in UFSAR Chapter 2 and 3. Thus flood protection is not an initial condition for any design basis accident that would present a challenge to the integrity of any fission product barrier. Therefore, TS 3.7.5 does not meet Criterion 2 for inclusion in the TSs.

**Comment – The flood events discussed in Chapter 2 and 3 are based on older analysis and apparently did not threaten the plant’s flood protection. However, due to the licensee’s discovery of a non-conservatism, this may no longer be true. The licensee should be more specific. If the flood protection is no longer adequate, then flooding could be an initiating event for an accident. Please explain the non-conservatism that currently exists and explain your position with regard to Criterion 2.**

RAI 1 Response

Entergy Operations Inc. letter dated November 21, 2011, (Reference 1) is a License Amendment Request (LAR) to relocate several Technical Specifications (TSs), including TS 3.7.5, Flood Protection, to the Technical Requirements Manual (TRM). The relocation of TS 3.7.5 to the TRM was justified in Reference 1 based on a determination that the TS 3.7.5 Limiting Condition for Operation (LCO) does not meet the four criteria in 10 CFR 50.36 for inclusion in the TSs. Additionally, relocation of TS 3.7.5 LCO was

evaluated in accordance with 10 CFR 50.91(a)(1) using the criteria in 10 CFR 50.92(c), and it was determined that the changes involve no significant hazards consideration.

This RAI requests an explanation of the TS 3.7.5 non-conservatism that currently exists and explanation of the position with regard to Criterion 2. As indicated in this RAI, the statement that TS 3.7.5 is non-conservative created a concern among the NRC staff that the flooding analysis described in the Waterford 3 Update Final Safety Analysis Report (UFSAR) and the resulting conclusions about the effect of flooding on Core Damage Frequency (CDF) described in the Waterford 3 Individual Plant Examination for External Events (IPEEE) (Reference 2) may no longer be valid.

The Entergy Operations Inc. letter dated November 21, 2011, (Reference 1) communicated that the TS 3.7.5 was identified to be non-conservative with respect to the implementation of flood protection actions. This non-conservative TS action statement was identified in the NRC Problem Identification and Resolution Inspection Report (PI&R), dated July 12, 2010, (Reference 3). The inspection report specifically states the following:

The team identified a noncited violation of 10 CFR 50.36 (b), "Technical Specifications," for failure to derive technical specifications from the analyses and evaluation included in the safety analysis report. Specifically, the licensee failed to derive an action statement for Technical Specification 3.7.5 that meets the assumptions included in the Waterford Unit 3 Updated Safety Analysis Report. The Updated Safety Analysis Report evaluation assumes an instantaneous levee failure occurs at a Mississippi River level of +27 feet mean sea level. The inspectors determined that the action statement for Technical Specification 3.7.5, to complete procedures to secure doors and penetrations in 12 hours, was not derived from the evaluation included in the safety analysis report because the actions would take place after the assumed instantaneous levee failure. The licensee entered this condition into the corrective action program as CR-WF3-2010-03232. As a short term compensatory measure, the licensee established criteria for taking appropriate action before the Mississippi River level would reach the +27 feet mean sea level safety limit.

The PI&R inspection report identifies that the TS 3.7.5 non-conservatism is in the TS action statement and that compensatory measures were taken. Because the non-conservative aspect of TS 3.7.5 is the TS action statement completion time and does not involve the LCO, the evaluation of TS 3.7.5 against the criteria in 10 CFR 50.36 for inclusion in TSs and the validity of the flooding analysis described in UFSAR are unaffected. Compensatory actions have been implemented which initiate procedures to secure doors and penetrations if Mississippi River level is projected to rise to +27 feet mean sea level within the next 12 hours. These actions will be completed well before reaching the river level assumed in the Updated Final Safety Analysis Report evaluation.

Waterford 3 has implemented administrative controls, in accordance with NRC Administrative Letter 98-10 (Reference 4), to apply revised TS action statement timing while the NRC completes its review and approval. The final resolution is being tracked in accordance with the Entergy Corrective Action Program due to being cited in NRC Problem Identification and Resolution Inspection Report (PI&R), dated July 12, 2010, (Reference 3).

RAI 2

The statements below are from the amendment application:

2. Criterion 4. Criterion 4 refers to a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. The Waterford 3 Individual Plant Examination for External Events (IPEEE) response [Reference 7.12] found no high winds, floods, or off site industrial facility accidents that significantly alters the Waterford 3 estimate of either the core damage frequency, or the distribution of containment release categories. The NRC IPEEE safety evaluation [Reference 7.13] reiterated this information as the licensee stated that Waterford 3 complies with the 1975 Standard Review Plan (SRP) criteria. Based on this compliance, all of the high winds, floods, transportation, and other (HFO) external events were dropped from further consideration and judged to not be a significant contributor to the total Core Damage Frequency (CDF). Based upon these risk insights, TS 3.7.5 does not meet Criterion 4 for inclusion in the TSs.

**Comment – Conclusions based on IPEEE studies may not be valid for this LAR. Please provide some alternate reasoning for not having to meet Criterion 4.**

RAI 2 Response

The response to RAI 1 provides the basis that the non-conservatism identified in the TS 3.7.5 action statement does not impact the TS 3.7.5 LCO or UFSAR analysis, nor does it impact the validity of the IPEEE analysis.

References:

1. Entergy Operations Inc. letter, License Amendment Request to Relocate Technical Specifications to the Technical Requirements Manual -- Waterford Steam Electric Station Unit 3, dated November 21, 2011 (ADAMS Accession No. ML11326A283).
2. Waterford 3 Individual Plant Examination for External Events (IPEEE), dated July 28, 1995.
3. Waterford Steam Electric Station, Unit 3 - NRC Problem Identification and Resolution Inspection Report (PI&R) 05000382/2010006, dated July 12, 2010, (ADAMS Accession No. ML101930439).
4. NRC Administrative Letter 98-10, Dispositioning of Technical Specifications That Are Insufficient to Assure Plant Safety, dated December 29, 1998.