

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

Michael R. Chisum Site Vice President Waterford 3

W3F1-2015-0042

July 21, 2015

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk 11555 Rockville Pike Rockville, MD 20852

Subject:

Flood Hazard Reevaluation Report

Waterford Steam Electric Station, Unit 3 (Waterford 3)

Docket No. 50-382 License No. NPF-38

References:

- 1. NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, dated March 12, 2012 (ADAMS Accession No. ML12053A340).
- 2. NRC Letter, Prioritization of Response Due Dates for Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights From the Fukushima Dai-ichi Accident, dated May 11, 2012 (ADAMS Accession No. ML12097A509).
- 3. Entergy's Response to the NRC Request for Information (RFI) Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendations 2.1 and 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Daiichi Accident. W3F1-2012-0045 dated June 7, 2012 (ADAMS Accession No. ML12164A676).
- 4. NRC Letter, Supplemental Information Related to Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, dated March 1, 2013 (ADAMS Accession No. ML13044A561).
- 5. Flooding Walkdown Report Entergy's Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendation 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, W3F1-2012-0101 dated November 27, 2012 (ADAMS Accession No. ML12333A147).
- 6. NRC, Interim Staff Guidance, Guidance for Performing the Integrated Assessment for External Flooding, JLD-ISG-2012-05, Revision 0, November 30, 2012 (ADAMS Accession No. ML12311A214).

A010 HRR

- 7. U.S. Nuclear Regulatory Commission, NUREG/CR-7046, "Design-Basis Flood Estimation for Site Characterization at Nuclear Power Plants in the United States of America", dated November 2011 (ADAMS Accession No. ML11321A195).
- 8. Extension Request Response to March 12, 2012, Request for Information Enclosure 2, Recommendation 2.1, Flooding, Required Response 2, Flood Hazard Reevaluation Report, W3F1-2015-0020 dated March 5, 2015 (ADAMS Accession No. ML15064A014).
- 9. NRC Letter, Waterford Steam Electric Station, Unit 3 Relaxation of Response Due Dates Regarding Flooding Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of the Insights from the Fukushima Dai-Ichi Accident, dated April 27, 2015. (ADAMS Accession No. ML15103A618).

## Dear Sir or Madam:

On March 12, 2012, the NRC issued Reference 1 to request information associated with Near-Term Task Force (NTTF) Recommendation 2.1 for Flooding. One of the required responses in this letter directed licensees to submit a Hazard Reevaluation Report (FHRR), including the interim action plan requested in Item 1.d of Reference 1, Enclosure 2, if appropriate. On May 11, 2012, the NRC issued the prioritization plan developed by the NRC and resultant Flooding Hazard Reevaluation due dates for all sites. Reference 2, Enclosure 1 identified the Waterford 3 site as a Category 3 Site requiring a Flooding Hazard Reevaluation Report submittal due date of March 12, 2015. In Reference 3, Waterford 3 indicated that it planned to comply with the requested response dates. On March 5, 2015, Waterford 3 submitted Reference 8 requesting an extension of the response date for the Flooding Hazard Reevaluation Report and the NRC granted the request with a required response date for submitting the FHRR of July 24, 2015 (Reference 9).

The FHRR for Waterford 3 is provided in Attachment 2. The report indicates that the current plant design is potentially vulnerable to a flooding hazard of Local Intense Precipitation (LIP), assuming a loss of offsite power concurrent with a failure of one of the two emergency diesel generators. The below interim actions have been taken to mitigate the LIP event:

- OP-901-521, "Severe Weather and Flooding" Off-Normal Procedure, was revised to ensure two Dry Cooling Tower (DCT) sump pumps are operating within 30 minutes after the onset of the LIP event. The procedure utilizes warning time triggers and weather monitoring guidance provided in Nuclear Energy Institute (NEI) white paper entitled "Warning Time for Maximum Precipitation Events"
- Reactor Containment Building (RCB) roof drains were walked down by Engineering to determine the extent of debris accumulation per CR-WF3-2015-1282, Corrective Action 12. The RCB roof drains were observed to be unobstructed.

- Essential task PMRQ 8620-07 was created to inspect and clean roof drains on the RCB on an annual basis to ensure they remain free of debris. This is an essential task which cannot be deleted or have the frequency of performance modified without Engineering's concurrence.
- 4. Operations procedure, OP-100-014, "Technical Specification and Technical Requirements Compliance" provides guidance on the allowed outage time for specific equipment. As an enhancement to maximize availability of DCT sump pumps during projected periods of heavy precipitation, Note (2) on Attachment 6.6 was revised to reflect that "Maintenance should not be commenced on any DCT sump pump during times when there are weather forecasts that indicate a threat of heavy rain (>2" per hour)."

Waterford 3 commits to not modify any of these interim actions without notifying our NRC Project Manager in advance. Attachment 1 summarizes this commitment.

Should you have any questions concerning the content of this letter, please contact John Jarrell, Regulatory Assurance Manager, at (504) 739-6685.

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 21, 2015.

Sincerely,

MRC/AJH

Attachment:

1. List of Regulatory Commitments

2. Flood Hazard Reevaluation Report

CC:

Attn: Director, Office of Nuclear Reactor Regulation

U.S. NRC

RidsNrrMailCenter@nrc.gov

Mr. Mark L. Dapas, Regional Administrator

U. S. NRC, Region IV

RidsRgn4MailCenter@nrc.gov

NRC Project Manager for Waterford 3

Michael.Orenak@nrc.gov

NRC Senior Resident Inspector for Waterford 3 Frances.Ramirez@nrc.gov Chris.Speer@nrc.gov

## **ATTACHMENT 1**

W3F1-2013-0042

LIST OF REGULATORY COMMITMENTS

## **List of Regulatory Commitments**

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (Check One)		SCHEDULED
	ONE- TIME ACTION	CONTINUING COMPLIANCE	COMPLETION DATE (If Required)
Waterford 3 commits to not modify any of the interim actions stated in W3F1-2015-0042 without notifying the NRC Project Manager in advance		Х	NA