

#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

August 29, 2011

Vice President, Operations Entergy Operations, Inc. Waterford Steam Electric Station, Unit 3 17265 River Road Killona, LA 70057-3093

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 - AUDIT OF THE LICENSEE'S MANAGEMENT OF REGULATORY COMMITMENTS (TAC NO. ME5711)

Dear Sir/Madam:

In U.S. Nuclear Regulatory Commission (NRC) Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000, the NRC informed licensees that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes," contains acceptable guidance for controlling regulatory commitments and encouraged licensees to use the NEI guidance or similar administrative controls to ensure that regulatory commitments are implemented and that changes to the regulatory commitments are evaluated and, when appropriate, reported to the NRC.

The NRC Office of Nuclear Reactor Regulation has instructed its staff to perform an audit of licensees' commitment management programs once every 3 years to determine whether the licensees' programs are consistent with the industry guidance in NEI 99-04, and that the regulatory commitments are being effectively implemented.

An audit of Waterford Steam Electric Station, Unit 3's (Waterford 3's) commitment management program was performed at the plant site on May 11-12, 2011. Based on the audit, the NRC staff concludes that Entergy Operations, Inc. (the licensee), has implemented NRC commitments on a timely basis and has implemented an effective program for managing NRC commitment changes at Waterford 3. The details of the results of the audit, including the NRC staff observations and recommendations, are set forth in the enclosed audit report.

If you have any questions, I can be contacted at (301) 415-1480 or via e-mail at <u>kaly.kalyanam@nrc.gov</u>.

Sincerely,

Kaly Juli

N. Kalyanam, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosure: As stated

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#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

# AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## LICENSEE MANAGEMENT OF REGULATORY COMMITMENTS

## ENTERGY OPERATIONS, INC.

## WATERFORD STEAM ELECTRIC STATION, UNIT 3

## DOCKET NO. 50-382

#### 1.0 INTRODUCTION AND BACKGROUND

In U.S. Nuclear Regulatory Commission (NRC) Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000 (Agencywide Documents Access and Management System (ADAMS) Accession No. <u>ML003741774</u>), the NRC informed licensees that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes," contains acceptable guidance for controlling regulatory commitments and encouraged licensees to use the NEI guidance or similar administrative controls to ensure that regulatory commitments are implemented and that changes to the regulatory commitments are evaluated and, when appropriate, reported to the NRC.

The NRC Office of Nuclear Reactor Regulation (NRR) has instructed its staff to perform an audit of licensees' commitment management programs once every 3 years to determine whether the licensees' programs are consistent with the industry guidance in NEI 99-04, and that the regulatory commitments are being effectively implemented.

NEI-99-04 defines a "regulatory commitment" as an explicit statement to take a specific action agreed to, or volunteered by, a licensee and submitted in writing on the docket to the NRC. NRR guidelines direct the NRR Project Manager to audit the licensee's commitment management program by assessing the adequacy of the licensee's implementation of a sample of commitments made to the NRC in past licensing actions (amendments, relief requests, exemptions, etc.) and licensing activities (bulletins, generic letters, etc.).

#### 2.0 AUDIT PROCEDURE AND RESULTS

An audit of the Waterford Steam Electric Station, Unit 3 (Waterford 3) commitment management program was performed at the plant site on May 11-12, 2011. The audit reviewed commitments made by Entergy Operations, Inc. (Entergy, the licensee) since the previous audit on July 24 and 25, 2008, which was documented in an audit report dated August 14, 2008 (ADAMS Accession No. <u>ML082240088</u>). The audit consisted of two parts: (1) verification of the licensee's implementation of regulatory commitments that have been completed, and (2) verification of the licensee's program for managing changes to regulatory commitments.

## 2.1 Verification of Licensee's Implementation of Regulatory Commitments

The primary focus of this part of the audit is to confirm that the licensee has implemented those commitments made to the NRC as part of past licensing actions/activities. For commitments that had not yet been implemented, the NRC staff aimed to ascertain that they have been captured in an effective program for future implementation.

## 2.1.1 Audit Scope

The audit addressed a sample of commitments, majority of which were made during the review period of approximately the last 3 years. The audit focused on regulatory commitments made in writing to the NRC as a result of past licensing actions (amendments, exemptions, relief requests, etc.) and licensing activities (bulletins, generic letters, etc.).

## 2.1.2 Audit Results

Entergy has implemented Corporate Procedure EN-LI-110, "Commitment Management Program," which identifies the methods and site organization tools for managing development, review, and implementation of station commitments.

The documents furnished by the licensee during the audit included summary sheets providing the status of the commitments and appropriate backup documentation, as needed (i.e., commitment change evaluation form, plant procedures, examination records, and/or other plant documentation). The NRC staff reviewed the documents and summarized the selected commitments information in the attachment to this audit report.

The NRC staff audit confirmed that the licensee has documented its implementation of regulatory commitments made to the NRC staff as part of past licensing. The NRC staff audit of the licensee's commitment management program for Waterford 3 did not identify any regulatory commitments that were not satisfied or incorporated into its Commitment Management Program for implementation. The licensee's database was found to be well maintained and the commitments selected for this audit were easily traceable in the database. Licensee personnel were able to demonstrate effective use of the commitment management database and provided status tracking to the applicable implementation documents.

Based on the above, the NRC staff concludes that the licensee has implemented the regulatory commitments management program effectively in accordance with LIC-105, "Managing Regulatory Commitments Made by Licensees to the NRC," and consistent with NEI 99-04.

The attachment to this audit report contains details of the audit and a summary of the audit results

## 2.2 Verification of the Licensee's Program for Managing Regulatory Commitment Changes

The primary focus of this part of the audit was to verify that the licensee has established administrative controls for satisfying, modifying, or deleting commitments made to the NRC.

The NRC staff found that the process sets forth the need for identifying, initiating, tracking, and reporting commitments, managing a change or deviation from a previously completed commitment.

#### 2.2.1 Audit Results

The NRC staff reviewed Corporate Procedure EN-LI-110 and its required forms to determine whether the licensee had an effective program in place to identify, manage, and close commitments made to the NRC as part of licensing actions/activities. In addition, the NRC staff reviewed relevant reports and summary sheets from the computer database and other sources providing the status of each commitment, tracking and change forms, and other associated documentation.

The NRC staff compared the guidance in the Entergy Corporate Procedure EN-LI-110 to the guidance in NEI 99-04. As a result of this comparison, the NRC staff found that EN-LI-110 was consistent with the NEI guidance for identifying, managing, and closing commitments. The NRC staff also found that roles and responsibilities, processes, and metrics were clearly identified in the Corporate Procedure.

Based on the review of the reports provided by the licensee as described above, queries of the CTS database, and the accompanying change review and tracking forms provided during the audit, the NRC staff found that the licensee's implementation of its program for managing NRC commitment changes in accordance with its site procedure has the deficiencies noted below:

In the "Commitment List," under the columns titled, "Text," "Comments," and "Status," a short description of the corrective action to be taken, general comments, and the status of the commitment are provided chronologically. While the NRC staff audit found that many of these notes contained the author(s) (with initials) and date(s), this was not done in a consistent and uniform manner. Many of the notes lacked the author's identity and the date. The NRC staff views these additions provide a valuable historical background.

The attached Audit Summary (Attachment 2) provides details of this portion of the audit and its results.

#### 3.0 <u>CONCLUSION</u>

Based on the audit, the NRC staff concludes that (1) Entergy has generally implemented or is tracking for future implementation NRC commitments on a timely basis, and (2) the licensee has implemented an effective program to manage regulatory commitment changes, in accordance with LIC-105 and consistent with NEI 99-04.

#### 4.0 LICENSEE PERSONNEL CONTACTED FOR THIS AUDIT

W. Steelman M. Mason J. Williams J. Pollock

Principal Contributor: N. Kalyanam

Date: August 29, 2011

Attachment: Summary of Audit Results

#### Summary of Regulatory Commitment Audit Results Performed on May 11-12, 2011 Waterford Steam Electric Station, Unit 3 Entergy Operations, Inc. Docket No. 50-382

	Date of			Commitment			
TAC No.	Licensee's Letter	ADAMS Accession No.	No.	Description	Documents Reviewed	Comments, if any	Status and Date
ME3421	Seismic Category   SI-405A(B). The r   and installed as Sa   Society of Mechar   up to and including   A-27420   A code reconciliati   components procu   described above.   A-27421   SI-4052A(B) seism   requirements of FS   Section 3.9C and FSAR Table 3.9-9   A-27422   SI-4052A(B) will b   environmental and   containment as sh   A-27423   SI-4052A(B) will b   Requirements [Mag   (Containment Isolation)   A-27423   SI-4052A(B) will b   Requirements [Mag   (Containment Isolation)   A-27423   SI-4052A(B) will b   Requirements [Mag   (Containment Isolation)   A   A   A   B   A   B   B   B   B   B   A   B   B   Containment Isolation   B	A-27 A-27	A-27419)	SI-4052A(B) will be procured as a Safety Class 1 and Seismic Category 1 with a similar code edition as SI-405A(B). The new bypass line will be procured and installed as Safety Related, ASME [American Society of Mechanical Engineers] Section III, Class 1 up to and including solenoid valve SI-4052A(B).		The NRC staff did not accept the scheduled completion dates of the commitments, "Prior to Refuel 17, return to Mode 4," and stated that it would approve the License Amendment Request only after evidence of meeting the commitments. Entergy provided the requested information through the following letters: • 6/8/2010 (ML101620417). • 8/12/2010 (ML102300177).	Closed 5/11/2011
			A-27420	A code reconciliation will be performed for any components procured to different code edition than described above.			Closed 5/11/2011
			A-27421	SI-4052A(B) seismic qualification will meet the requirements of FSAR [Final Safety Analyses Report] Section 3.9C and the new valves will be added to FSAR Table 3.9-9 and 3.9C-1.			Closed 5/11/2011
			A-27422	SI-4052A(B) will be procured to withstand the environmental and accident conditions inside containment as shown in FSAR Table 3.11-1.			Closed 5/11/2011
		SI-4052A(B) will be included in Technical Requirements [Manual (TRM)] Table 3.6-2 (Containment Isolation Valves) similar to SI-405A(B) to demonstrate compliance with GDC [General Design Criterion] 55(a).	EC-14765	−• 3/7/2011 ( <u>ML110670210</u> ).	Closed 5/10/2011		
		A-27425 Seismic qualifications for the controls will meet IEEE- [Institute of Electrical and Electronics Engineers] 344-1975 requirements.		Closed 5/11/2011			
ME2464	10/19/2009	<u>ML092940242</u>	A-27304	Upon NRC approval of the proposed TS [Technical Specification] change, Entergy will relocate the Waterford 3 Steam Generator Level – High trip function to the Waterford Technical Requirements Manual within 90 days of NRC approval.	EC-22790	Upon receipt of Amendment 225 on 3/18/2010, the change was implemented.	Satisfied 7/6/2010

	Date of Licensee's Letter		Commitment	Commitment	Documents Reviewed	Comments, if any	Status and Date		
TAC No.		ADAMS Accession No.	No.	Description					
MD5966	7/3/2007	<u>ML071870125</u>	A-27205	The details of the diesel fuel oil testing program, including the acceptance criteria for the parameters that are included in the sample results, will be maintained in site procedures that are reviewed in accordance with 10 CFR 50.59.	EC-10752	TS 6.5.13 Diesel Fuel Oil Testing Program which includes sampling and testing requirements, and acceptance criteria, all in accordance with applicable American Society for Testing and Materials (ASTM) Standards was added.	Closed 11/3/2008		
ME3128	9/18/2008	08 <u>ML082660038</u>	A-27195	Entergy will establish the Technical Specification (TS) Bases for Limiting Condition for Operation (LCO) 3.0.8 as adopted with the applicable license amendment.	LO-LAR-2008- 00216	Upon receipt of Amendment 219 on 5/1/2009, within 60 days it was implemented.	Closed 6/30/2008		
				A-27196	Entergy will ensure, during the relocation of the TS 3.7.8 snubber requirements to the Technical Requirements Manual, that the TRM Actions are modified, in accordance with 10 CFR 50.59, to require a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any Tier 2 restrictions each time a required snubber is rendered inoperable and the associated plant configuration.	LO-LAR-2008- 00216	TRM change includes relocation of snubbers and identification of snubbers required for seismic only.	Closed 6/30/2009	
				A-2	/		A-27197	Entergy will revise plant procedures or administrative process to ensure seismic risks are considered during application of the LCO 3.0.8 delay period when one or more snubbers are inoperable.	10 CFR 50.59 review for the TRM
MD9671	9/18/2008	ML082660040	A-27198	Entergy will extend the second 10-year inservice inspection interval from 10 years to 20 years for the Examination Category B-A and B-D reactor vessel welds and perform the Waterford 3 inspection in the 2015 refueling outage plus or minus one refueling cycle.	LO-WTWF- 2009-0029	RF 19 is currently scheduled to start in spring 2014. Also, the due date for this commitment set to monitor can be extended as far as RF 21.	Open		
			A-27199	Entergy will perform the second 10-year inservice inspection of the Examination Category B-J welds associated with the reactor vessel during the Waterford 3 Fall 2009 refueling outage.	LO-LAR-2008- 00220	Since Waterford 3 has been approved for risk informed examination as per ASME Code Case N-716, all the category B-J welds have been reclassified as Category R-A welds inspections do not have to be performed as per this commitment.	Closed 10/7/2009		

TAC No.	Date of Licensee's Letter		Commitment				
		ADAMS Accession No.	No.	Description	Documents Reviewed	Comments, if any	Status and Date
MD9657			A-27279	NRC RAI on withdrawing the TS 3/4.3.1 exception of not requiring adjustment of power indication between 15 percent and 80 percent of Rated Thermal Power associated with the initial power ascension following a refueling outage.		By letter dated 6/30/2009 ( <u>ML091830040</u> ), Entergy withdraws the exception on Core Protection Calculator (CPC) note.	Closed 7/18/2009
ME2411	10/19/2009	<u>ML092940243</u>	A-27306	The alternative examination proposed by the Relief Request W3-ISI-016 will be performed for Waterford 3.	LO-LAR-2007- 00206	The alternate examinations proposed by Request for Alternative, W3-ISI-016, is complete. The eddy current examination was performed in accordance with the revised relief request, W3F1-2009-0062 ( <u>ML093080128</u> ), where the commitment was revised to acquire and analyze ICI ultrasonic data from a minimum of 1.5-inch above the J-groove weld, instead of the originally proposed 1-inch above the J-groove weld.	Closed 2/11/2010

	Date of Licensee's Letter		Commitment		_		
TAC No.		ADAMS Accession No.	No.	Description	Documents Reviewed	Comments, if any	Status and Date
ME2401	10/19/2009	<u>ML092940241</u>	A-27307	Entergy will perform eddy current examinations of the inside diameter and the nozzle tube lower face in accordance with Code Case N-729-1 as conditioned by 10 CFR 50.55a(g)(6)(ii)(D). Entergy will also acquire and analyze incore instrumentation (ICI) ultrasonic data from 1 inch above the J-groove weld to the detectable extent of the nozzle tube below the J-groove weld. (Improvements in data acquisition and analysis that were developed during qualification of CEDM [control element drive mechanism] volumetric examinations will be incorporated in the proposed ICI examinations).	LO-LAR-2007- 00206	The alternate examinations proposed by Request for Alternative, W3-ISI-016, is complete. The eddy current examination was performed in accordance with the revised relief request, W3F1-2009-0059 ( <u>ML093080127</u> ), where the commitment was revised to acquire and analyze ICI ultrasonic data from a minimum of 1.5-inch above the J-groove weld, instead of the originally proposed 1-inch above the J-groove weld.	Closed 2/11/2010
			A-27308	If ultrasonic (TOFD) data is determined to have unacceptable quality in the nozzle tube from the root of the J-groove weld to 1 inch below the root of the J- groove weld, then a manually delivered eddy current examination of the ICI penetration tube OD [outside diameter] surface will be performed.	<u>ML050400463</u> dated 2/5/2005. LO-LAR- 2007- 00206	The alternative examination proposed in Relief Request W3- ISI-016 for the ICI nozzles was performed in accordance with the revised relief request, W3F1-2009- 0059. The ultrasonic data in the area from the root of the J-groove weld to 1 inch below the root of the J-groove weld was acceptable quality. Therefore, the manually delivered eddy current examination of the ICI penetration tube OD surfacewas not required on any of the ICI nozzles	Closed 2/11/2010
ME1207	4/27/2009	<u>ML091390436</u>	A-27265	Removal of plant-specific TS requirements will be performed concurrently with the implementation of 10 CFR 26, Subpart I requirements. This commitment will be completed no later than October 1, 2009.		With adoption of TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26," the amendment was implemented 10/1/2009.	Closed 10/1/2009

- 25	Date of Licensee's Letter	ADAMS Accession No.	Commitment		· · · · ·		
TAC No.			No.	Description	Documents Reviewed	Comments, if any	Status and Date
ME2221	9/9/2009	<u>ML092540575</u>	A-27312	When the Multi-Purpose Canister (MPC) lid is connected to the transfer cask lift yoke and the lift yoke extension, if used, designed to ANSI [American National Standards Institute] N14.6 requirements as specified in the HI-STORM FSAR during handling of the MPC lid over the loaded MPC-32 canister, the slings between the lid and the lifting device shall be constructed of metallic wire rope and meet the requirements of ASME B30.9 and NUREG-0612.	LO-LAR-2010- 00071 RF-005-002, Revision 308		OPEN (Due Date 6/30/2011)
	7/22/2010	<u>ML102070092</u>	A-27311	Entergy will upgrade the existing Fuel Handling Building (FHB) cask crane main hoist to meet the single-failure-proof criteria of NUREG-0554 and NUREG-0612 as is applicable for the modification of the existing non single failure proof crane.	EC-14270	With the completion of EC-14270, the FHB crane has been upgraded to single failure-proof requirements.	Closed 5/10/2011
ME4729	11/23/2010	ML103340117	A-27400	Commitment 1: Waterford 3 will replace the fibrous insulation on the current steam generators with Reflective Metal Insulation, with a scheduled completion date of "Prior to Mode 4 after Refueling Outage 17."		By letter dated 2/9/2011, Entergy notified the NRC staff the change of the commitment completion from refueling outage (RFO) 17 to RFO 18 in conjunction with the replacement of steam generators.	Open
			A-27401	Commitment 2: Revise Emergency Operating Procedures to include contingency actions for a Low Pressure Safety Injection pump failing to trip on Recirculation Actuation Signal, with a scheduled completion date of "Prior to Mode 4 after Refueling Outage 17."	OP-902-008 OP-902-002	The EOPs OP-902-002 and OP- 902-008 were revised to carry the contingency actions on 5/2/11. Waterford 3 entered Mode 4 on 5/8/11.	Closed 5/2/2011

If you have any questions, I can be contacted at (301) 415-1480 or via e-mail at kaly.kalyanam@nrc.gov.

Sincerely,

/RA/

N. Kalyanam, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

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