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W3F1-2011-0087

December 19, 2011

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

SUBJECT: Commitment Change for Reactor Vessel Internals Degradation
Management Program
Waterford Steam Electric Station, Unit 3
Docket No. 50-382
License No. NPF-38

REFERENCES:

1. Entergy Letter dated February 5, 2005, "Supplement to Amendment Request NPF-38-249 Extended Power Uprate" [Adams Accession No. ML050400463]
2. Entergy Letter dated April 7, 2010, "Commitment Change Associated with Reactor Vessel Internals Degradation Management Program" [Adams Accession No. ML100990355]
3. NRC letter dated June 12, 2009, "Waterford Steam Electric Station, Unit 3 – Request for Alternative W3-ISI-006 for the Second 10-Year Inservice Inspection Interval (TAC No. MD9671)" [Adams Accession No. ML091210375]
4. TR MRP-227 SER [Adams Accession No. ML111600498]
5. NRC Regulatory Issue Summary 2011-07 License Renewal Submittal Information for Pressurized Water Reactor Internals Aging Management (Dated July 21, 2011) [Adams Accession No. ML111990086]
6. NRC letter dated April 28, 2008, "Waterford Steam Electric Station, Unit 3 – Request for Alternative W3-ISI-006 Request to use ASME Code Case N-716 (TAC NO. MD7061)" [Adams Accession No. ML080980120]

Dear Sir or Madam:

In Entergy Letter dated February 5, 2005 (reference 1), Entergy Operations, Inc. (Entergy) made the following commitment:

Entergy Operations, Inc (Entergy) is currently an active participant in the Electric Power Research Institute (EPRI) Materials Reliability Program (MRP) research

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initiatives on aging related degradation of reactor vessel internal components. Entergy commits to:

- a. continue its active participation in the MRP initiative to determine appropriate reactor vessel internals degradation management programs,
- b. evaluate the recommendations resulting from this initiative and implement a reactor vessel internals degradation management program applicable to Waterford 3,
- c. incorporate the resulting reactor vessel internals inspections into the Waterford 3 augmented inspection plan as appropriate.

In addition, as requested by the NRC, a description of the program, including the inspection plan, will be submitted to the NRC for review and approval. The submittal date will be within 24 months after the final EPRI MRP recommendations are issued or within five years from the date of issuance of the updated license, whichever comes first.

Entergy Letter dated April 7, 2010 (reference 2) notified the NRC of a change to the commitment of record made in reference 1. The fundamental change affected the schedule for submitting a description of a reactor vessel internals degradation management program to the NRC for review and approval. The revised commitment required submittal of the plan by December 31, 2011.

This letter is to notify the NRC of a change to the commitment made in reference 2. The fundamental change affects the schedule for submitting a description of a reactor vessel internals degradation management program, also referred to as an Aging Management Program (AMP), to the NRC for review and approval. The current commitment of record requires submittal of the plan by December 31, 2011. The revised commitment will require submittal of the plan 24 months prior to entering the period of extended operation associated with its License Renewal Application as provided for in NRC Regulatory Issue Summary 2011-07 License Renewal Submittal Information for Pressurized Water Reactor Internals Aging Management (reference 5).

Discussion:

The Materials Reliability Program, Pressurized Water Reactor Internals Inspection and Evaluation Guidelines (MRP-227-Rev. 0), final report was issued in December 2008. This document contains Mandatory, Needed and Good Practice elements as defined in the Implementation Protocol of NEI 03-08 and is required for all operating commercial U.S. Pressurized Water Reactors (PWRs). The Mandatory element is that each commercial U.S. PWR unit shall develop and document a PWR reactor internals aging management program within thirty-six months following issuance of MRP-227-Rev. 0. With this requirement, the due date for the U.S. PWRs to document their aging management programs will be December 2011.

Waterford 3 is a Combustion Engineering (CE) Pressurized Water Reactor and has been in operation since 1985. Waterford 3's current license period is 40 years and is due to expire in 2025. Per MRP-227-Rev. 0, table 4-2, "CE Plants Primary Components," the frequency of

examinations for Waterford 3's components would occur no later than two refueling outages from the beginning of the license renewal period. With this requirement, the earliest Waterford 3 would be required to complete the examinations would be approximately 2026. Entergy Plans to seek license renewal in 2025.

Waterford 3 is continuing its program currently in effect to implement the required ISI Inspections of the Reactor Vessel ISI components. In NRC letter dated June 12, 2009 (reference 3), the NRC approved a request for Alternative W3-ISI-006 for the Second 10-Year Inservice Inspection Interval (TAC No. MD9671). Alternative W3-ISI-006 is related to ISI Inspections of the Reactor Vessel ISI components. Reference 3 approved deferral of the B-A and B-D Reactor Vessel ISI inspections to 2015 plus/minus one refueling outage based on Risk Informed Extension of Reactor Vessel ISI Interval WCAP-16168-NP. There was also a commitment to inspect B-J reactor vessel components in the fall 2009 (RF16). The B-J reactor vessel welds were subsequently removed from the Third Interval ISI program under the N-716 risk informed ISI program initiative authorized by NRC letter dated April 28, 2008 for the remainder of the Second 10-year ISI Interval and for its third 10-year ISI interval (reference 6).

There is evolving NRC guidance associated with reactor vessel internals aging management programs. NRC letter dated June 22, 2011, TR MRP-227 SER (reference 4) issued the final safety evaluation of EPRI report on MRP-227, Revision 0 (TAC NO. ME0680). There were eight plant-specific action items and seven conditions enclosed with the safety evaluation, and EPRI was requested to publish an accepted version of the Topical Report (TR) that incorporated the letter (reference 4) and the safety evaluation. An accepted version of MRP-227 has not yet been issued (i.e. MRP-227-A).

It has been indicated in reference 4 that NRC's acceptance of a program applies only to material provided in the subject TR. The NRC does not intend to repeat a review of the acceptable material described in the TR. When the TR appears as a reference in license applications, the NRC review will ensure that the material presented applies to the specific plant involved. License amendment requests that deviate from this TR will be subject to a plant-specific review in accordance with applicable review standards. Waterford 3 believes a plant-specific review would not be efficient for either party and would not take advantage of the groundwork already performed for MRP-227.

Most importantly, NRC Regulatory Issue Summary (RIS) 2011-07 License Renewal Submittal Information for Pressurized Water Reactor Internals Aging Management (reference 5) informed Entergy of updated NRC procedures for license renewal application (LRA) reviews or the review of certain licensee submittals related to commitments made in the process of receiving a renewed license. This RIS also provided information to licensees with respect to how to meet their existing license renewal commitments related to reactor vessel internals aging management programs, and on acceptable changes to existing license renewal commitments in order to account for the recent issue of the staff's final Safety Evaluation (SE) of MRP-227, Rev.0, and the forthcoming issue of the approved version of MRP-227. The purpose of this RIS was to facilitate a predictable and consistent method for reviewing the AMPs of commercial PWR LRAs. The intent is to provide licensees sufficient time to modify their AMPs to be consistent with MRP-227-A and provides information regarding the potential for licensees to modify the original commitment date for the submittal of a RVI AMP for their facilities.

With the issuance of the staff SE for MRP-227, the NRC has updated internal guidance on implementation of this RVI component AMP guidance relative to license renewal for PWR plants on a plant-specific basis (reference 5). Plant-specific basis categories A through D were defined. Waterford 3 falls into Category D in that it has not submitted an LRA but plans to submit an LRA in the future. The NRC staff encourages future license renewal applicants to provide an AMP for vessel internals in their LRA that is consistent with MRP-227-A.

Waterford 3 is informing the NRC that Waterford 3 intends to follow the Mandatory element of MRP-227-Rev. 0 that each commercial U.S. PWR unit shall develop and document a PWR reactor internals aging management program (AMP) within thirty-six months following issuance of MRP-227-Rev. 0 (December 31, 2011).

Waterford 3 confirms that it will implement an AMP consistent with MRP-227-A. Waterford 3 will submit a description of the program, including the inspection plan, to the NRC for review and approval 24 months prior to entering the period of extended operation associated with its License Renewal Application.

Since no examinations would need to be completed prior to two refueling outages from the beginning of the license renewal period, this change in the commitment will affect administrative requirements only and will not adversely impact the safety provisions of the commitment.

This letter contains one new commitment and one revised commitment as summarized in Attachment 1.

If you have any questions or require additional information, please contact William J Steelman, Licensing Manager at (504) 739-6685.

Sincerely,

for William J. Steelman

MICHAEL E. MASON

WJS/RJP/ssf

Attachment:

1. Revised Regulatory Commitment

cc: Mr. Elmo E. Collins, Jr. RidsRgn4MailCenter@nrc.gov
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Attachment 1

To

W3F1-2011-0087

Revised Regulatory Commitment

Revised Regulatory Commitment

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 COMPLETION DATE (If Required)
	ONE- TIME ACTION	CONTINUING COMPLIANCE	
<p>Entergy Operations, Inc (Entergy) is currently an active participant in the Electric Power Research Institute (EPRI) Materials Reliability Program (MRP) research initiatives on aging related degradation of reactor vessel internal components. Entergy commits to:</p> <ul style="list-style-type: none"> a. continue its active participation in the MRP initiative to determine appropriate reactor vessel internals degradation management programs, b. evaluate the recommendations resulting from this initiative and implement a reactor vessel internals degradation management program applicable to Waterford 3, c. incorporate the resulting reactor vessel internals inspections into the Waterford 3 augmented inspection plan as appropriate. 	X		December 31, 2011
<p>Entergy Operations, Inc (Entergy) Waterford SES Unit 3 Waterford 3 confirms that it will implement an AMP consistent with MRP-227-A and will provide an AMP for vessel internals in its License Renewal Application that is consistent with MRP-227-A for NRC staff review and approval.</p>	X		24 months prior to entering the period of extended operation associated with its LRA