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Date: 4/2/2008 9:31:36 AM
Subject: DRAFT RAI on Refurbishment
cc: "Donna Tyner" <dtynr@entergy.com>,"Andrew Stuyvenberg"
<ALS3@nrc.gov>,<IPNonPublicHearingFile@nrc.gov>

Dara and Mike,

Attached is a draft request for additional information related to the Indian Point license renewal application. Please review and let me know if/when we can have a call. The purpose of the telecon will be to obtain clarification on the staff's questions.

Thanks,

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**Draft Request for Additional Information (RAI)
Regarding Refurbishment for Indian Point Nuclear Generating Unit Nos. 2 and 3**

The staff received scoping comments during its review of the License Renewal Application (LRA) for Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and IP3) indicating that Entergy had taken steps toward procuring replacement reactor vessel heads for IP2 and IP3 (ADAMS accession nos. ML071990093 and ML073100985). The scoping comments contained excerpts from a presentation by Doosan Heavy Industries indicating that Doosan plans to deliver replacement reactor vessel heads and control rod drive mechanisms (CRDMs) for IP2 and IP3 in October of 2011 and 2012, respectively. Based on this information, the staff requested, by letter to Entergy dated December 5, 2007, additional information regarding refurbishment.

Entergy's response, dated January 4, 2008, indicated that "no reactor vessel head replacements are required for purposes of aging management during the period of extended operation. Accordingly, no evaluation of the environmental impacts of reactor vessel head replacement as a refurbishment activity is required or presented in the Environmental Report." Further, Entergy also noted that "the decision to proceed with procurement of long lead items [replacement vessel heads] is strictly economic," and therefore need not be addressed in Entergy's Environmental Report.

During a telephone conference call on March 18, 2008 (ADAMS Accession number forthcoming), the staff acknowledged that while there may be no requirement to replace the reactor vessel heads at IP2 and IP3 for license renewal, Section 2.6.1 of the Generic Environmental Impact Statement for License Renewal (GEIS) discusses environmental impact-initiating actions associated with license renewal. These actions include: (1) refurbishment, repair, or replacement activities that "may be performed to ensure that this objective [aging management and maintaining functionality of certain SSCs] is achieved," and (2) activities that the licensee may choose to undertake, including "various refurbishment and upgrade activities at their nuclear facilities to better maintain or improve reliability, performance, and economics of power plant operation during the extended period of operation." Since the GEIS considers refurbishment activities beyond those that are related to aging management during the period of extended operation, Entergy's response to the staff's RAI related to refurbishment did not effectively address the scoping comment regarding this potential refurbishment activity.

During the conference call, Entergy indicated that, if license renewal were not being pursued for IP2 and IP3, the vessel head forgings would not have been ordered. Entergy also indicated that the vessel head forgings that were procured for IP2 and IP3 may never be needed, and any future decision by Entergy to replace reactor vessel heads for IP2 and/or IP3 is as yet uncertain.

Question 1:

In order for the NRC staff to better understand the specific nature of the steps taken by Entergy with respect to its plans for reactor vessel head and CRDM replacement, please identify the factors that Entergy may consider in deciding whether to replace these components. Please describe how each factor affects Entergy's decision whether to replace the vessel heads and CRDMs.

Question 2:

The staff recognizes that there may be no certainty with respect to reactor vessel head and/or CRDM replacement at IP2 and/or IP3. Therefore, Entergy's response to Question 1 above will

be duly considered by the staff in determining whether to address the potential environmental impacts of these actions in the upcoming draft Supplemental Environmental Impact Statement. Nevertheless, based on the information presented in the scoping comment and the conference call discussion with Entergy staff on March 18, 2008, the NRC staff may proceed with a review of the impacts associated with reactor vessel head and CRDM replacement in accordance with 10 CFR 51.71. To facilitate the staff's review and understanding of these impacts, please provide additional information and supporting analysis regarding the Category 1 and Category 2 impacts (as listed in 10 CFR 51 Subpart A, Appendix B, Table B-1) that would be associated with reactor vessel head and CRDM replacement (all issues are listed in Table B-1 and included in Chapter 3 of the GEIS). If Entergy is unable to provide information specifically addressing the likely impacts of replacing vessel heads and CRDMs at IP2 and IP3, please provide impact estimates based on Entergy's experience at other plants. If Entergy-specific information is not available, please provide estimates based on industry experience in replacing these components.