IPRenewal NPEmails

From: Kimberly Green
Sent: Tuesday, April 22, 2008 10:09 AM
To: MICHAEL D STROUD; dtyner@entergy.com
Cc: Bo Pham; Kenneth Chang; James Davis
Subject: Draft RAIs on Operating Experience
Attachments: RAI Set 11 - Operating Experience.doc

Mike and Donna,

Attached are draft requests for additional information related to the Indian Point license renewal application. Please review and let me know when Entergy is available to discuss. The purpose of the telecon will be to obtain clarification on the staff's questions.

Please let me know if you have any questions.

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INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3
LICENSE RENEWAL APPLICATION
DRAFT REQUEST FOR ADDITIONAL INFORMATION (D-RAI)
OPERATING EXPERIENCE

D-RAI RCS-1

Review of the condition report (CR) summaries related to Class 1 mechanical systems identified four areas of degraded conditions. Those areas are as follows: (1) borated water leakage/boric acid deposits associated with control rod drive, control rod drive mechanism, resistance temperature device, reactor pressure vessel (RPV) bottom head, seal tables, penetrations, fittings and thimble tubes; (2) seal housing bolt cracks; (3) steam generator tube indications; and (4) RPV head weld indications.

Please provide the following information for each type of degraded condition identified above, in sufficient detail for the staff to make a determination about the adequacy of corrective actions for the extended period of operation:

(a) history of the degradation;
(b) evaluation of the extent of degradation;
(c) corrective actions already taken or planned;
(d) the current status of the degraded condition;
(e) special or augmented aging management requirements during the period of extended operation;
(f) license renewal commitments.

Based on the staff's review of the CR list, it is not clear to the staff if this list contains all significant plant-specific reactor coolant system (RCS) component degradation experienced at Indian Point Unit 2 (IP2) and Indian Point Unit 3 (IP3). Please identify and provide the same information (items a-f) for any other significant existing conditions of aging for the RCS not specifically identified in this RAI.

In addition, please identify and provide the same information (items a-f) for other significant existing conditions of aging, if applicable, in any Class 1 mechanical components for LRA Section 3.2 to 3.4.

D-RAI RCS-2

Based on the review of the plant basis documents associated with operating experience discussions for aging management programs (AMPs) B.1.16, B.1.18, B.1.30, and B.1.31, the staff found that additional information is needed to complete its operating experience review. Therefore, please provide the following additional information to assist the staff in its review:

(i) For AMPs B.1.16, B.1.18, B.1.30, and B.1.31, please describe in sufficient detail the plant-specific CR review that forms the basis to conclude that each of these existing programs will be effective in managing applicable aging effects, as identified in the LRA.

(ii) For new AMPs B.1.37 and B.1.38, which are currently being developed, the AMP description of each program identifies that RCS components will be managed for thermal and/or

irradiation embrittlement. Please describe in sufficient detail any operating experience for these AMPs, and the review of plant-specific and industry-wide operating experience for those RCS components that have been identified as potentially susceptible to thermal and/or irradiation embrittlement at IP2 and IP3.

D-RAI AUX-1

In reviewing plant basis documents and CR summaries related to operating experience applicable to non-Class 1 mechanical systems in the areas of Diesel Fuel Monitoring, Oil Analysis, Service Water Integrity, Water Chemistry Control Auxiliary Systems and Water Chemistry Control Closed Cooling Water Systems, the staff identified conditions of aging degradation in LRA Section 3.3 that are not described in detail in LRA or plant basis documents. The areas of aging degradation identified by the staff were in the following areas: (1) degraded IP2 traveling screens; (2) eroded fuel line in IP2 utility tunnel caused by in-leakage; (3) erosion/corrosion of IP2 components and thru-wall leaks; (4) IP3 feedwater outer-diameter thinning; and (5) IP3 service water degradation.

The applicant is requested to provide the following information for each type of degraded condition identified above, in sufficient detail for the staff to make a determination about the adequacy of corrective actions for the extended period of operation:

(a) history of the degradation;
(b) evaluation of the extent of degradation;
(c) corrective actions already taken or planned;
(d) the current status of the degraded condition;
(e) special or augmented aging management requirements during the period of extended operation;
(f) license renewal commitments.

In addition, the applicant is requested to identify and provide the same information (items a-f) for other significant existing conditions of aging in non-Class 1 mechanical components in LRA Sections 3.2 and 3.4, specifically addressed in this RAI.

D-RAI AUX-2

Appendix B of the LRA concluded that the Service Water Integrity Program has been effective in managing those aging effects for which it is credited based on the results of one peer assessment, one self assessment and five NRC inspections of the Generic Letter (GL) 89-13 program. NRC GL 89-13 guidelines are directed to ensure the performance of safety-related systems and components exposed to service water. It is not clear to the staff how the results of these inspections are used to confirm the effectiveness of managing aging effects in nonsafety-related components of the service water system (SWS) that are within scope for license renewal.

The staff requests the applicant to clarify whether the Service Water Integrity Program is credited for aging management of the nonsafety-related components of the SWS that are within scope for license renewal. If so, please provide evidence for the conclusion presented in the LRA, that this AMP is effective in managing age-related degradation of the SWS. If not, identify the AMP(s) that are credited for aging management of the nonsafety-related components of the SWS that are within scope for license renewal. Provide the basis for concluding that these

programs have been or will be effective for managing aging during the period of extended operation.