

IPRenewal NPEmails

From: STROUD, MICHAEL D [MSTROUD@entergy.com]
Sent: Tuesday, April 29, 2008 12:47 PM
To: Kimberly Green
Cc: COX, ALAN B; TAYLOR, ANDREW C
Subject: Telecon Summary 04-28-08 Operating Experience - TAYLOR markup (2).doc
Attachments: Telecon Summary 04-28-08 Operating Experience - TAYLOR markup (2).doc

Kim,

See attached recommended changes to the OE telecon summary.

Thanks

Mike

<<Telecon Summary 04-28-08 Operating Experience - TAYLOR markup (2).doc>>

Hearing Identifier: IndianPointUnits2and3NonPublic_EX
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Subject: Telecon Summary 04-28-08 Operating Experience - TAYLOR markup (2).doc
Sent Date: 4/29/2008 12:47:26 PM
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From: STROUD, MICHAEL D

Created By: MSTROUD@entergy.com

Recipients:

"COX, ALAN B" <acox@entergy.com>
Tracking Status: None
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Return Notification: No
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Recipients Received:

LICENSEE: Entergy Nuclear Operations, Inc.

FACILITY: Indian Point Nuclear Generating Unit Nos. 2 and 3

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON APRIL 28, 2008, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND ENTERGY NUCLEAR OPERATIONS, INC., CONCERNING RESPONSES TO REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3, LICENSE RENEWAL APPLICATION—OPERATING EXPERIENCE

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Entergy Nuclear Operations, Inc. held a telephone conference call on April 28, 2008, to discuss and clarify the staff's draft request for additional information (D-RAI) concerning the Indian Point Nuclear Generating Unit Nos. 2 and 3, license renewal application. The telephone conference call was useful in clarifying the intent of the staff's D-RAI.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the D-RAI items discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

Kimberly Green, Safety Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosures:

1. List of Participants
2. Summary of Discussion

cc w/encls: See next page

LICENSEE: Entergy Nuclear Operations, Inc.

FACILITY: Indian Point Nuclear Generating Unit Nos. 2 and 3

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Kimberly Green, Safety Project Manager
Projects Branch 2
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Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

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cc w/encls: See next page

DISTRIBUTION: See next page

ADAMS Accession No.:

OFFICE	LA:DLR	PM:RPB2:DLR	BC:RPB2:DLR
NAME		KGreen	RFranovich
DATE	05/ /08	05/ /08	05/ /08

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**TELEPHONE CONFERENCE CALL
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3
LICENSE RENEWAL APPLICATION**

**LIST OF PARTICIPANTS
APRIL 28, 2008**

PARTICIPANTS

AFFILIATIONS

Kim Green	U.S. Nuclear Regulatory Commission (NRC)
Ken Chang	NRC
Jim Davis	NRC
On Yee	NRC
Raj Auluck	NRC
Rich Morante	Brookhaven National Laboratory (BNL)
Ken Sullivan	BNL
Mano Subudhi	BNL
Mike Stroud	Entergy Nuclear Operations, Inc. (Entergy)
Alan Cox	Entergy
Andy Taylor	Entergy
Charlie Caputo	Entergy
John Curry	Entergy

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

April 28, 2008

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Entergy Nuclear Operations, Inc. held a telephone conference call on April 28, 2008, to discuss and clarify the following draft requests for additional information (D-RAIs) concerning the Indian Point Nuclear Generating Unit Nos. 2 and 3 license renewal application (LRA).

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.

Discussion: The applicant wanted to understand what the staff is requesting. It appears that the staff is questioning the corrective action program for which there are ongoing inspections that are performed by the Region. The staff stated that the question is parallel to a question on operating experience for structures that was asked during an audit and that the goal is to show effectiveness of the applicable aging management programs. Upon this clarification, the applicant stated that it will answer the staff's RAI. This D-RAI will be sent as a formal RAI.

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.

Discussion: The applicant stated that for part (ii) of the question, the programs that are referenced are new programs, and therefore, the plant does not yet have operating experience. The staff asked the applicant if it had reviewed any industry operating experience, and that a description of what it had reviewed and identified as part of that review is what can be provided in its response. The applicant stated that the industry operating experience cited in NUREG-1801 for these programs may be referenced in its response. This D-RAI will be sent as a formal RAI.

The applicant stated that for part (i) of the question, the review of operating experience was not limited to a CR review, and that a description of the process would be provided. The staff stated that this would be acceptable.

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.

Discussion: The applicant wanted clarification on the staff's request, particularly part (a). The applicant stated several CRs can comprise one aging degradation category as delineated in the staff's question, and that to provide a history on each CR for each type of degradation would be quite cumbersome. The staff clarified that a summary of the general history for each type of degradation would be sufficient and that the goal is to show effectiveness of the applicable aging management programs. Upon this clarification, the applicant stated that it will answer the staff's question. This D-RAI will be sent as a formal 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.

Discussion: The applicant pointed out what appears to be a typo. The staff will fix the typo and the revised question will be sent as a formal RAI.

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.