

IPRenewal NPEmails

From: STROUD, MICHAEL D [MSTROUD@entergy.com]
Sent: Thursday, May 15, 2008 3:36 PM
To: Kimberly Green
Subject: FW: Telecon Summary 05-07-08 RV and Neutron Embrittlement.doc
Attachments: Telecon Summary 05-07-08 RV and Neutron Embrittlement.doc

Kim,

See comments on attached file.

Thanks
Mike

From: FRONABARGER, DON
Sent: Thu 5/15/2008 12:43 PM
To: STROUD, MICHAEL D
Cc: COX, ALAN B
Subject: Telecon Summary 05-07-08 RV and Neutron Embrittlement.doc

I made a few editorial changes and included with Alan's comments on the attached.

Hearing Identifier: IndianPointUnits2and3NonPublic_EX
Email Number: 77

Mail Envelope Properties (A79A58994C541C48BBCFB319610763CB01DEDC2C)

Subject: FW: Telecon Summary 05-07-08 RV and Neutron Embrittlement.doc
Sent Date: 5/15/2008 3:35:46 PM
Received Date: 5/15/2008 3:37:11 PM
From: STROUD, MICHAEL D

Created By: MSTROUD@entergy.com

Recipients:
"Kimberly Green" <Kimberly.Green@nrc.gov>
Tracking Status: None

Post Office: LITEXETSP002.etrsouth.corp.entergy.com

Files	Size	Date & Time
MESSAGE	320	5/15/2008 3:37:11 PM
Telecon Summary 05-07-08 RV and Neutron Embrittlement.doc		75330

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
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 MAY 7, 2008, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND ENTERGY NUCLEAR OPERATIONS, INC., RELATED TO THE INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3, LICENSE RENEWAL APPLICATION—STATUS OF OPEN ITEMS

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Entergy Nuclear Operations Inc (Entergy) held a telephone conference call on May 7, 2008, to obtain the status on open items related to reactor vessel surveillance and neutron embrittlement. By letter dated October 29, 2007, the NRC issued a request for additional information (RAI) on Reactor Vessel Surveillance Program and the Reactor Neutron Embrittlement Time-Limited Aging Analyses. Entergy responded by letter dated November 28, 2007. Subsequently, on December 3, and 4, 2007, the staff held telephone conference calls with the applicant to obtain clarification on the responses to the RAI. At that time, Entergy committed to revise some of the responses. By letter dated January 17, 2008, Entergy submitted additional information; however, the staff identified a few issues that remained open pending the receipt of information from Entergy. The May 7, 2008, telephone conference call was useful in obtaining the status and proposed resolution of the open items.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the open 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:
As stated

cc w/encl: See next page

LICENSEE: Entergy Nuclear Operations, Inc.

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

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON MAY 7, 2008, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND ENTERGY NUCLEAR OPERATIONS, INC., RELATED TO THE INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3, LICENSE RENEWAL APPLICATION—STATUS OF OPEN ITEMS

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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:
As stated

cc w/encl: See next page
DISTRIBUTION: See next page

ADAMS Accession No.: ML

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

OFFICIAL RECORD COPY

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

**LIST OF PARTICIPANTS
MAY 7, 2008**

PARTICIPANTS

Kim Green
Barry Elliot
Mike Stroud
Alan Cox
Ted Ivy
Don Fronabarger
Ron Finnin

AFFILIATIONS

U.S. Nuclear Regulatory Commission (NRC)
NRC
Entergy Nuclear Operations, Inc. (Entergy)
Entergy
Entergy
Entergy
AREVA

**INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3
LICENSE RENEWAL APPLICATION
STATUS OF OPEN ITEMS**

May 7, 2008

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Entergy Nuclear Operations, Inc. held a telephone conference call on May 7, 2008, to obtain the status and proposed resolution of the open items related to reactor vessel surveillance and neutron embrittlement concerning the Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and IP3) license renewal application (LRA).

Open Item 4.2.1-1

In its January 17, 2008, response to RAI 4.2.1-1, the applicant identified the neutron fluxes assumed for all future operating cycles; however, the methodology for determining the neutron fluxes for the reactor vessel (RV) in IP2 was not identified.

Discussion:

Entergy stated that the neutron fluence calculations are included in the stretch power uprate [application-submittal](#) (WCAP-16157) on page 5.1-3. The staff will review the information in the WCAP report.

Open Item 4.2.1.3

LRA Sections A.2.2.1 and A.3.2.1 need to be revised based on the applicant's response to RAI 4.2.1-1.

Discussion:

Entergy ~~stated that it will include the information in the LRA annual update~~ [agreed to revise LRA Sections A.2.2.1 and A.3.2.1.](#)

Open Item 4.2.2.2a

In response to RAI 4.2.2-2, the applicant provided information for IP2 regarding fracture mechanics analyses and margins of safety against fracture equivalent to those required by Appendix G of Section XI of the ASME Code for beltline materials having C_vUSE values below the screening limit of 50 ft-lb in 10 CFR Part 50, Appendix G. A similar analysis must be provided for the IP3 RV

Discussion:

Entergy ~~stated that it will include the information in the LRA annual update~~ [agreed to provide the requested analysis.](#)

Open Item 4.2.2.2b

The applicant cites [as its equivalent margins analysis](#) WCAP-13587, Rev. 1, ~~as its equivalent margins analysis~~ which was developed using draft Regulatory Guide DG-1023, which has been superseded by Regulatory Guide (RG) 1.161, "Evaluation of Reactor Pressure Vessels with Charpy Upper-Shelf Energy Less Than 50 ft-lb," and ASME Code Case N-512, which has since been incorporated into Section XI of the ASME Code through the 2003 Addenda. However, the applicant had not previously requested [approval for](#)the use of the WCAP report. To demonstrate that the methodology and criteria in the equivalent margins analyses (WCAP - 13587, Rev. 1) for the IP2 and IP3 RVs are equivalent to the methodology and criteria in RG 1.161 and Appendix K of Section XI of the ASME Code, the applicant must compare and contrast the methodology and criteria in WCAP-13587, Rev. 1, for the IP2 and IP3 RVs to the methodology and criteria in RG 1.161 and Appendix K of Section XI of the ASME Code, [200? Edition, 200? Addenda](#).

Discussion:

The staff stated that if the use of the WCAP has not been formally requested, it is not part of the applicant's current licensing basis (CLB). Therefore, the applicant will need to compare the analysis in the WCAP ~~that it has~~ cited in the LRA with the methodology currently endorsed by the NRC in RG 1.161 and Appendix K to ASME Section XI. In a follow up phone call with Entergy, it stated that it will perform the comparison as requested.

Open Item 4.2.2.3

LRA Sections A.2.2.1.3 and A.3.2.1.3 contain summary descriptions of the applicant's actions to address CvUSE; however, LRA Section A.3.2.1.3 needs to be revised to reflect the applicant's response in its January 17, 2008, letter.

Discussion:

Entergy stated that the [information revised LRA Section A.3.2.1.3](#) is on page 21 of the response letter. The staff will review the cited information.

Open Item 4.2.4.3

LRA Section A.2.2.1.2 and A.3.2.1.2 contain summary descriptions of the TLAA evaluation of LTOP PORV setpoints; however, LRA Sections A.2.2.1.2 and A.3.2.1.2 need to be revised to discuss LTOP PORV setpoints.

Discussion:

Entergy ~~stated that it will include the information in the LRA annual update~~[agreed to revise the relevant LRA sections to include](#) ~~ed~~ [the requested discussion](#).

Open Item 4.2.5.2

Entergy has not identified the methodology used determining the impact of the different irradiation temperatures and different amounts of copper and nickel for the surveillance welds on the ΔRT_{NDT} and M values for the IP2 intermediate shell and lower axial shell welds.

Discussion:

Entergy stated that the information is contained in a WCAP report that will be submitted in the near future to support a license amendment [request for P-T curves](#). Entergy indicated that it will either submit [the](#) WCAP in advance of the license amendment request ~~minus the P-T curves~~, or possibly include the ~~verbiage related to the method of determination in the LRA annual update~~[requested information in separate correspondence](#).