RAS E-105

UNITED STATES NUCLEAR REGULATORY COMMISSION

USNRC

May 22, 2008 (2:42pm)

OFFICE OF SECRETARY RULEMAKINGS AND ADJUDICATIONS STAFF

ATOMIC SAFETY LICENSING BOARD

X	
In re:	Docket Nos. 50-247-LR and 50-286-LR
License Renewal Application Submitted by	ASLBP No. 07-858-03-LR-BD01
Entergy Nuclear Indian Point 2, LLC, Entergy Nuclear Indian Point 3, LLC, and	DPR-26, DPR-64
Entergy Nuclear Operations, Inc.	May 22, 2008

NEW YORK STATE'S SUPPLEMENTAL CITATION IN SUPPORT OF ADMISSION OF CONTENTION 26A

On May 14, 2008 – two weeks after the State of New York submitted its Reply to Entergy's Answer and NRC Staff's Response to New York's Supplemental Contention No.26-A (Metal Fatigue) – the NRC Staff posted on ADAMS a May 8, 2008 Summary of an April 3, 2008 telephone conference between Entergy and Staff regarding, *inter alia*, how much information NRC Staff would require Entergy to produce as part of its License Renewal Application. The Summary is contained in Attachment 1 to this Supplement, and is also available at ML081190059. The May 8 Summary reveals that Entergy, with the acquiescence of Staff, does not intend to allow the details of how it will address metal fatigue issues to be made a part of this license renewal proceeding. Enclosure 1 to May 8, 2008 Summary of April 3, 2008 Telephone Conference, at pages 1 to 3.

This newly-disclosed information supplements the statements made by New York State in its May 1, 2008 Reply at the end of the first full paragraph on page 10.

TEMPLATE = SECY-037

DS-03

¹The New York State Office of the Attorney General received a copy of the May 8, 2008 Summary via U.S. Mail on May 19, 2008.

Respectfully submitted, May 22, 2008

John J. Sipos
Janice A. Dean
Assistant Attorneys General
Office of the Attorney General
for the State of New York
The Capitol
Albany, New York 12224
(518) 402-2251
john.sipos@oag.state.ny.us

Joan Leary Matthews
Senior Attorney for Special Projects
New York State Department
of Environmental Conservation
625 Broadway, 14th floor
Albany, New York 12233-5500
(518) 402-9190
jlmatthe@gw.dec.state.ny.us

John Louis Parker, Esq.
Regional Attorney
New York State Department
of Environmental Conservation
21 South Putt Corners Rd
New Paltz, NY 12561-1620

ATTACHMENT 1

NRC May 8, 2008 Summary of an April 3, 2008 telephone conference between Entergy and NRC Staff

also available at ML081190059



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

NYS OFFICE OF THE ATTORNEY GENERAL RECEIVED

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ENVIRONMENTAL PROTECTION BUREAU ALEANY

May 8, 2008

LICENSEE: Entergy Nuclear Operations, Inc.

FACILITY:

Indian Point Nuclear Generating Unit Nos. 2 and 3

SUBJECT:

SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON APRIL 3, 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 —

METAL FATIGUE, BOLTED CONNECTIONS, AND BORAFLEX

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Entergy Nuclear Operations, Inc., held a telephone conference call on April 3, 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

where Gree

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

Indian Point Nuclear Generating Units 2 and 3

CC:

Senior Vice President
Entergy Nuclear Operations, Inc.
P.O. Box 31995
Jackson, MS 39286-1995

Vice President Oversight Entergy Nuclear Operations, Inc. P.O. Box 31995 Jackson, MS 39286-1995

Senior Manager, Nuclear Safety & Licensing Entergy Nuclear Operations, Inc. P.O. Box 31995
Jackson, MS 39286-1995

Senior Vice President and COO Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

Assistant General Counsel Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

Manager, Licensing
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
450 Broadway, GSB
P.O. Box 249
Buchanan, NY 10511-0249

Mr. Paul D. Tonko
President and CEO
New York State Energy Research and
Development Authority
17 Columbia Circle
Albany, NY 12203-6399

Mr. John P. Spath New York State Energy, Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399

Mr. Paul Eddy New York State Department of Public Service 3 Empire State Plaza Albany, NY 12223-1350

Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

Senior Resident Inspector's Office Indian Point 2 U.S. Nuclear Regulatory Commission P.O. Box 59 Buchanan, NY 10511

Senior Resident Inspector's Office Indian Point 3 U.S. Nuclear Regulatory Commission P.O. Box 59 Buchanan, NY 10511

Mr. Charles Donaldson, Esquire Assistant Attorney General New York Department of Law 120 Broadway New York, NY 10271

Mr. Raymond L. Albanese Four County Coordinator 200 Bradhurst Avenue Unit 4 Westchester County Hawthome, NY 10532

Mayor, Village of Buchanan 236 Tate Avenue Buchanan, NY 10511

Indian Point Nuclear Generating Units 2 and 3

CC:

Mr. William DiProfio PWR SRC Consultant 48 Bear Hill Road Newton, NH 03858

Mr. Garry Randolph PWR SRC Consultant 1750 Ben Franklin Drive, 7E Sarasota, FL 34236

Mr. William T. Russell
PWR SRC Consultant
400 Plantation Lane
Stevensville, MD 21666-3232

Mr. Jim Riccio Greenpeace 702 H Street, NW Suite 300 Washington, DC 20001

Mr. Phillip Musegaas Riverkeeper, Inc. 828 South Broadway Tarrytown, NY 10591

Mr. Mark Jacobs IPSEC 46 Highland Drive Garrison, NY 10524

Mr. R. M. Waters Technical Specialist Licensing 450 Broadway P.O. Box 0249 Buchanan, NY 10511-0249

Mr. Sherwood Martinelli 351 Dyckman Peekskill, NY 10566

Ms. Susan Shapiro, Esq. 21 Perlman Drive Spring Valley, NY 10977

John Sipos
Assistant Attorney General
New York State Department of Law
Environmental Protection Bureau
The Capitol
Albany, NY 12224

Robert Snook
Assistant Attorney General
Office of the Attorney General
State of Connecticut
55 Elm Street
P.O. Box 120
Hartford, CT 06141-0120

Ms. Kathryn M. Sutton, Esq. Morgan, Lewis & Bockius, LLP 1111 Pennsylvania Avenue, NW Washington, DC 20004

Mr. Paul M. Bessette, Esq. Morgan, Lewis & Bockius, LLP 1111 Pennsylvania Avenue, NW Washington, DC 20004

Mr. Martin J. O'Neill, Esq. Morgan, Lewis & Bockius, LLP 1111 Pennsylvania Avenue, NW Washington, DC 20004

The Honorable Nita Lowey 222 Mamaroneck Avenue, Suite 310 White Plains, NY 10605

Joan Leary Matthews
Senior Counsel for Special Projects
Office of General Counsel
NYS Department of Environmental
Conservation
625 Broadway
Albany, NY 12233-5500

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

LIST OF PARTICIPANTS APRIL 3, 2008

<u>PARTICIPANTS</u> <u>AFFILIATIONS</u>

Kim Green U.S. Nuclear Regulatory Commission (NRC)

On Yee NRC
Peter Wen NRC
Jim Davis NRC
Bo Pham NRC

Jim Medhoff NRC

Mike Stroud Entergy Nuclear Operations, Inc. (Entergy)

Garry Young Entergy
Alan Cox Entergy
Ted Ivy Entergy
Don Fronabarger Entergy

Charlie Caputo Entergy

Entergy

John Curry Entergy
Nelson Azevedo Entergy

Charlie Jackson Entergy

DRAFT REQUEST FOR ADDITIONAL INFORMATION INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3 LICENSE RENEWAL APPLICATION METAL FATIGUE

April 3, 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 3, 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 4.3.1.8-1

License Renewal Application Section 4.3.1 states "Current design basis fatigue evaluations calculate cumulative usage factors (CUFs) for components or sub-components based on design transient cycles." For CUF values listed in LRA Tables 4.3-13 and 4.3-14, please provide the methodology used with sufficient results of the fatigue analysis such that the staff can make a determination based on the guidance described in Standard Review Plan-License Renewal (SRP-LR) (NUREG-1800). Specifically, please describe the details of how environmentally assisted fatigue (EAF) is factored into the calculation of the CUF using F_{en} values.

<u>Discussion</u>: The applicant was uncertain as to whether the staff was requesting that they provide the evaluations or a description of evaluations. Based on the discussion with the applicant, the staff agreed to revise this question as follows. The revised question will be sent as a formal RAI.

License renewal application (LRA) Section 4.3.1 states "Current design basis fatigue evaluations calculate cumulative usage factors (CUFs) for components or subcomponents based on design transient cycles." For CUF values listed in LRA Tables 4.3-13 and 4.3-14, please describe the details of how various environmental effects are factored into the calculation of the CUF using $F_{\rm en}$ values.

D-RAI 4.3.1.8-2

From the review of EAF analysis of other plants, it was found that the transfer function methodology used in the EAF analysis may not provide valid results, as it is dependent on the inputs. To assist the staff in its review, please provide the EAF analysis for all the NUREG/CR-6260 locations (components) at Indian Point unless it can be demonstrated that the CUF value is within the ASME Code limit of 1.0 by using the original 40-year analysis value adjusted for 60 years and multiplied by Fen, which is consistent with SRP-LR and ASME Code. This analysis should be completed by using NRC-approved fatigue software and the ASME Code, Section III, Subsection NB-3200 methodology (which defines the use of six stress components to determine the stress state and thereby calculates the principal stresses and stress intensities). Justify the analysis method, the load (stress) combination, and the results of the ASME Code analysis if 2-D axis-symmetric modeling is used. In addition, the analysis should apply ASME code rules such as elastic-plastic correction factor, Ke, and stress intensities correction factor for modulus of elasticity. This analysis should be performed without the use of the transfer function method.

<u>Discussion</u>: The applicant wanted clarification on the staff's request. The applicant pointed out that the request is a new staff position and that for previous plants, the staff has not requested the analyses to be provided and has accepted a commitment to perform the analyses two years prior to entering the period of extended operation as part of the Fatigue Monitoring Program in accordance with 10 CFR 54.21(c)(1)(iii). Subsequent to the telephone conference, the staff determined that no additional information is needed at this time. Therefore, a formal RAI will not be issued at this time.

D-RAI 4.3.1.8-3

SRP-LR Section 4.3.2.1.1.3 provides the basis for the staff acceptance of an aging management program to address environmental fatigue. It states, "[T]he staff has evaluated a program for monitoring and tracking the number of critical thermal and pressure transients for the selected reactor coolant system components. The staff has determined that this program is an acceptable aging management program to address metal fatigue of the reactor coolant system components according to 10 CFR 54.21(c)(1)(iii)." The staff is unable to determine if the Fatigue Monitoring Program of IP2 and IP3 contain sufficient details to satisfy this criterion, based on the NA items listed in LRA Tables 4.3-13 and 4.3-14. Please provide adequate details of the Fatigue Monitoring Program, specifically the fatigue analysis used in determining the CUF values for the NA locations and how IPEC plans to proceed in monitoring the locations of Tables 4.3-13 and 4.3-14 during the period of extended operation.

<u>Discussion</u>: The applicant wanted clarification on what the staff is requesting. Based on the discussion with the applicant, the staff agreed to revise this question as follows. The revised question will be sent as a formal RAI.

Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants (SRP-LR) Section 4.3.2.1.1.3 provides the basis for the staff acceptance of an aging management program to address environmental fatigue. It states, "[t]he staff has evaluated a program for monitoring and tracking the number of critical thermal and pressure transients for the selected reactor coolant system components. The staff has determined that this program is an acceptable aging management program to address metal fatigue of the reactor coolant system components according to 10 CFR 54.21(c)(1)(iii)." The staff is unable to determine if the Fatigue Monitoring Program for Indian Point 2 and Indian Point 3 contains sufficient details to satisfy this criterion. Please provide adequate details of the Fatigue Monitoring Program such that the staff can make a determination based on the criterion set forth in SRP-LR Section 4.3.2.1.1.3. Also, please explain in detail the corrective actions and the frequency that such actions will be taken so that the acceptance criteria will not be exceeded in the period of extended operation. (This RAI will be renumbered as RAI 4.3.1.8-2.)

D-RAI 4.3.1.8-4

Section B.1.12 of the LRA amendment, dated January 22, 2008, states, "If ongoing monitoring indicates the potential for a condition outside that analyzed above, IPEC may perform further reanalysis of the identified configuration using established configuration management processes as described above." Please explain in detail what is meant by the phrase "using established configuration management processes." Also, please explain in detail the corrective actions and the frequency that such actions will be taken so the acceptance criteria will not be exceeded in the period of extended operation.

<u>Discussion</u>: The applicant stated that it was unclear about the staff's request regarding "configuration management processes." In a subsequent call, the applicant explained that the configuration management processes referred to are those governed by its 10 CFR Part 50, Appendix B Quality Assurance program, and include design input verification and independent reviews which ensure that valid assumptions, transients, cycles, external loadings, analysis methods, and environmental fatigue life correction factors will be used in the fatigue analyses. Therefore, this portion of question is withdrawn and will not be sent as a formal RAI. The portion of the request that deals with corrective actions will be added to RAI 4.3.1.8-2 (as renumbered).

Non-EQ Bolted Cable Connection AMP

D-RAI 3.0.3.3.6-1

With regard to Indian Point Aging Management Program (AMP) B.1.22, "Non-EQ Bolted Cable Connection Program," the license renewal application states that inspection methods may include thermography, contact resistance testing, or other appropriate methods including visual, based on plant configuration and industry guidance. In Generic Aging Lessons Learned (GALL) AMP XI.E6, the staff recommends thermography, contact resistance testing, or other appropriate methods based on plant configuration and industry guidance for detecting loss of preload or bolt loosening. In the case where visual inspection will be the only method used, provide a technical basis of how this will be sufficient to detect loss of preload or loosening of bolted connections.

<u>Discussion</u>: The applicant stated that this question is similar to an audit question that has been answered and subsequently discussed during two telephone conferences. This issue is being reviewed by the Division of Engineering and, therefore, is withdrawn at this time. However, when the staff has reached a determination, a formal RAI may be issued at such time.

Boraflex AMP

D-RAI 3.0.3.2.3-1

Indian Point 2 Updated Final Safety Analysis Report, Revision 20, dated 2006, Section 14.2.1 on page 55 of 218, states in part that:

"Northeast Technology Corporation report NET-173-01 and NET-171-02 are based on conservative projections of amount of boraflex absorber panel degradation assumed in each sub-region. These projections are valid through the end of the year 2006."

Please confirm that the Boraflex neutron absorber panels in the Indian Point Unit 2 spent fuel pool have been re-evaluated for service through the end of the current licensing period. Also, please discuss the plans for updating the Boraflex analysis during the period of extended operation.

<u>Discussion</u>: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY LICENSING BOARD

X	
In re:	
	Docket Nos. 50-247-LR and 50-286-LR
License Renewal Application Submitted by	
	ASLBP No. 07-858-03-LR-BD01
Entergy Nuclear Indian Point 2, LLC,	
Entergy Nuclear Indian Point 3, LLC, and	DPR-26, DPR-64
Entergy Nuclear Operations, Inc.	
X	

CERTIFICATE OF SERVICE

Pursuant to 28 U.S.C. § 1746 Teresa Fountain hereby declares:

I am over 18 years old and am an employee in the New York State Office of the Attorney General.

I hereby certify that on May 22, 2008, copies of "The State of New York's Supplemental Citation In Support of Contention 26A" were served upon the following persons via electronic mail and by deposit in the U.S. Postal Service with first class postage:

Lawrence G. McDade, Chair Administrative Judge Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Mailstop 3 F23 Two White Flint North 11545 Rockville Pike Rockville, MD 20852-2738 Lawrence.McDade@nrc.gov

Richard E. Wardwell
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mailstop 3 F23
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738
Richard.Wardwell@nrc.gov

Kaye D. Lathrop
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
190 Cedar Lane E.
Ridgway, CO 81432
Kaye Lathrop@nrc.gov

Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Mailstop 3 F23 Two White Flint North 11545 Rockville Pike Rockville, MD 20852-2738

Zachary S. Kahn, Esq.
Law Clerk
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mailstop 3 F23
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738
Zachary.Kahn@nrc.gov

Marcia Carpentier
Law Clerk
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mailstop 3 E2B
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738
Marcia.Carpentier@nrc.gov

Office of Commission Appellate Adjudication U.S. Nuclear Regulatory Commission Mailstop 16 G4
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738
ocaamail@nrc.gov

Office of the Secretary
Attn: Rulemaking and Adjudications Staff
U.S. Nuclear Regulatory Commission
Mailstop 3 F23
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738
hearingdocket@nrc.gov

Sherwin E. Turk, Esq. David E. Roth, Esq. Marcia J. Simon, Esq. Beth N. Mizuno, Esq. Jessica A. Bielecki, Esq. Office of the General Counsel U.S. Nuclear Regulatory Commission Mailstop 15 D21 One White Flint North 11555 Rockville Pike Rockville, MD 20852-2738 set@nrc.gov der@nrc.gov jessica.bielecki@nrc.gov bnm1@nrc.gov marcia.simon@nrc.gov

Kathryn M. Sutton, Esq.
Paul M. Bessette, Esq.
Martin J. O'Neill, Esq.
Mauri T. Lemoncelli, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004
ksutton@morganlewis.com
pbessette@morganlewis.com
martin.o'neill@morganlewis.com
mlemoncelli@morganlewis.com
cadams@morganlewis.com

Elise N. Zoli, Esq.
Goodwin Procter, LLP
Exchange Place
53 State Street
Boston, MA 02109
ezoli@goodwinprocter.com

William C. Dennis, Esq. Assistant General Counsel Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601 wdennis@entergy.com

Robert D. Snook, Esq.
Assistant Attorney General
Office of the Attorney General
State of Connecticut
55 Elm Street
P.O. Box 120
Hartford, CT 06141-0120
robert.snook@po.state.ct.us

Justin D. Pruyne, Esq.
Assistant County Attorney
Office of the Westchester County Attorney
Michaelian Office Building
148 Martine Avenue, 6th Floor
White Plains, NY 10601
jdp3@westchestergov.com

Daniel E. O'Neill, Mayor James Seirmarco, M.S. Village of Buchanan Municipal Building 236 Tate Avenue Buchanan, NY 10511-1298 vob@bestweb.net

Daniel Riesel, Esq.
Thomas F. Wood, Esq.
Jessica Steinberg, J.D.
Sive, Paget & Riesel, P.C.
460 Park Avenue
New York, NY 10022
driesel@sprlaw.com
jsteinberg@sprlaw.com

Michael J. Delaney, Esq.
Vice President - Energy Department
New York City Economic Development Corporation
(NYCEDC)
110 William Street
New York, NY 10038
mdelaney@nycedc.com

Arthur J. Kremer, Chairman
New York Affordable Reliable Electricity Alliance
(AREA)
347 Fifth Avenue, Suite 508
New York, NY 10016
kremer@area-alliance.org
ajkremer@rmfpc.com

Manna Jo Greene, Director Hudson River Sloop Clearwater, Inc. 112 Little Market St. Poughkeepsie; NY 12601 Mannajo@clearwater.org

Stephen Filler, Esq.
Board Member
Hudson River Sloop Clearwater, Inc.
Suite 222
303 South Broadway
Tarrytown, NY 10591
sfiller@nylawline.com

Susan H. Shapiro, Esq.
Weschester Citizen's Awareness Network
(WestCan), Citizens Awareness Network (CAN), etc.
21 Perlman Drive
Spring Valley, NY 10977
mbs@ourrocklandoffice.com

Nancy Burton 147 Cross Highway Redding Ridge, CT 06876 NancyBurtonCT@aol.com Richard L. Brodsky, Esq.
Assemblyman
Suite 205
5 West Main Street
Elmsford, NY 10523
brodskr@assembly.state.ny.us
richardbrodsky@msn.com

Sarah L. Wagner, Esq. Room 422 Legislative Office Building Albany, NY 12248 sarahwagneresq@gmail.com

John LeKay FUSE USA 351 Dyckman Street Peekskill, NY 10566 fuse_usa@yahoo.com

Diane Curran, Esq.
Harmon, Curran, Spielberg & Eisenberg, LLP
Suite 600
1726 M Street, NW
Washington, DC 20036
dcurran@harmoncurran.com

Phillip Musegaas, Esq.
Victor Tafur, Esq.
Riverkeeper, Inc.
828 South Broadway
Tarrytown, NY 10591
phillip@riverkeeper.org
vtafur@riverkeeper.org

I declare under penalty of perjury that the foregoing is true and correct.

Executed on:

this 22nd day of May 2008 Albany, New York

Teresa Fountain