


United States Nuclear Regulatory Commission Official Hearing Exhibit	
In the Matter of:	Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3)
	<b>ASLBP #:</b> 07-858-03-LR-BD01
	<b>Docket #:</b> 05000247   05000286
	<b>Exhibit #:</b> NRC000116-00-BD01
	<b>Admitted:</b> 10/15/2012
	<b>Rejected:</b>
<b>Other:</b>	<b>Identified:</b> 10/15/2012
	<b>Withdrawn:</b>
	<b>Stricken:</b>

NRC000116  
Submitted: March 31, 2012

April 18, 2008

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

**SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3, LICENSE RENEWAL APPLICATION – TIME-LIMITED AGING ANALYSES AND BORAFLEX**

Dear Sir or Madam:

By letter dated April 23, 2007, as supplemented by letters dated May 3, 2007, and June 21, 2007, Entergy Nuclear Operations, Inc., submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the operating licenses for Indian Point Nuclear Generating Unit Nos. 2 and 3, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review. Further requests for additional information may be issued in the future.

Items in the enclosure were discussed with Mr. Robert Walpole, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-1627, or via e-mail [KJG1@nrc.gov](mailto:KJG1@nrc.gov).

Sincerely,

**/RA/**

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

Docket Nos. 50-247 and 50-286

Enclosure:  
As stated

cc w/encl: See next page

April 18, 2008

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Entergy Nuclear Operations, Inc.  
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450 Broadway, GSB  
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**/RA/**

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

Docket Nos. 50-247 and 50-286

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As stated

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ADAMS Accession No.: **ML080870374**

OFFICE	PM:RPB2:DLR	LA:DLR	BC:RPB2:DLR
NAME	KGreen (BPham for)	IKing	RFranovich (BPham for)
DATE	03/28/08	03/31/08	04/18/08

**OFFICIAL RECORD COPY**

Letter to Entergy from K. Green, dated April 18, 2008

DISTRIBUTION:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE  
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3, LICENSE  
RENEWAL APPLICATION – TIME-LIMITED AGING ANALYSES AND  
BORAFLEX

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**INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3  
LICENSE RENEWAL APPLICATION  
REQUEST FOR ADDITIONAL INFORMATION (RAI)  
TIME-LIMITED AGING ANALYSES AND BORAFLEX**

**Time-Limited Aging Analyses**

**RAI 4.3.1.8-1**

License renewal application (LRA) Section 4.3.1 states “[c]urrent 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 describe the details of how various environmental effects are factored into the calculation of the CUF using  $F_{en}$  values.

**RAI 4.3.1.8-2**

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 of Indian Point 2 and Indian Point 3 contain 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 the acceptance criteria will not be exceeded in the period of extended operation.

**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.

Indian Point Nuclear Generating  
Unit Nos. 2 and 3

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