



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

May 9, 2011

LICENSEE: Entergy Nuclear Operations, Inc.

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

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 12, 2011, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND ENTERGY NUCLEAR OPERATIONS, INC., CONCERNING THE FINAL SEIS FOR THE PROPOSED LICENSE RENEWAL OF INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3.

The U.S. Nuclear Regulatory Commission (NRC or the staff) and Entergy Nuclear Operations, Inc. (Entergy), held a telephone conference call on January 12, 2011, in order for Entergy to share its concerns about the staff's analysis of aquatic ecology impacts in the Final Supplemental Environmental Impact Statement (FSEIS) Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3. Entergy provided a written summary of its concerns via e-mail on February 4, 2011, available in the NRC's Agencywide Documents Access and Management System under accession number ML110410355.

Enclosure 1 contains a participant list, while Enclosure 2 contains a summary of the teleconference.

Briana Balsam for

Andrew L. Stuyvenberg, Project Manager
Environmental Review and Guidance Update Branch
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosures:
As stated

cc w/encl: Listserv

**Teleconference Regarding
Indian Point Final SEIS Aquatic Ecology Impacts Concerns
January 12, 2011**

PARTICIPANTS

<u>Name</u>	<u>Affiliation</u>
Fred Dacimo	Entergy Nuclear Operations, Inc. (Entergy)
Dara Gray	Entergy
Larry Barnthouse	Entergy
Doug Heimbuch	Entergy
Mark Mattson	Entergy
John Young	Entergy
Andy Imboden	U.S. Nuclear Regulatory Commission (NRC)
Dennis Logan	NRC
Andrew Stuyvenberg	NRC

**Teleconference Regarding
Indian Point Final SEIS Aquatic Ecology Impacts Concerns
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Summary

Entergy indicated to NRC staff that it had specific questions about the staff's aquatic ecology impacts analysis in the Final Supplemental Environmental Impact Statement (FSEIS), and requested an opportunity to share them with the staff. The staff set up a teleconference for Entergy to present its concerns. NRC staff indicated that it would listen to Entergy's concerns, but not specifically respond to them in the course of the teleconference. Entergy staff and NRC staff discussed a possible follow-up public meeting at a later date to address the concerns, if necessary.

Entergy indicated that it had concerns in three broad areas: 1) interpretation and use of Hudson River data; 2) the NRC staff's impact levels; and 3) the model NRC staff used to assign impacts.

1. Interpretation and use of Hudson River data

Entergy asserted that NRC staff estimates of total organisms impinged at Indian Point, as shown in Table I-42 of the FSEIS, is too large by three orders of magnitude (1000 times), and asserted that NRC staff had misinterpreted the data that Entergy provided to NRC. Entergy indicated that the NRC numbers were three orders of magnitude higher than data reported to the New York State Department of Environmental Conservation.

2. Impact Levels

Entergy expressed concern about the criteria staff used to assign SMALL, MODERATE, and LARGE impact levels in the FSEIS. Entergy indicated that the NRC staff's approach for differentiating SMALL impacts from non-SMALL impacts was clear, but the difference between MODERATE and LARGE impacts was unclear. Specifically, Entergy expressed uncertainty about how NRC staff defines a destabilizing impact on a population (a criterion for a LARGE impact) and how one would establish that destabilization is occurring.

3. Staff's Model

Entergy inquired as to how the staff's model accounts for mortality. Entergy asserted that any measureable impact to a species would, over enough time, appear to lead to extinction for a species. Entergy asserted that this type of model assumes that there's no maximum sustainable yield for fish species analyzed, and thus does not appear consistent with fisheries science.

Entergy asserted that the staff's model accounts for entrainment and impingement mortality, as well as internal variability, but also appears to respond to two other factors. First, the number of years of records has an effect on the strength of connection; if enough years are included, then any species will have a positive strength of connection. Second, Entergy asserts that the NRC's use of detectability as a criterion in its definition of impact levels introduces a bias against high

ENCLOSURE 2

quality monitoring programs because the ability to detect change increases with the amount of data used.

Regarding NRC staff's entrainment assessment, Entergy indicated that Hudson River Segment 4 is not a closed section with defined populations, so using data only from Segment 4 leads to higher impacts because the data only includes a part of the Hudson River's population of a given species. Entergy asked why NRC staff based their estimates on Segment 4 rather than riverwide data combined with conditional entrainment mortality rates and conditional impingement mortality rates from the 1999 Hudson River Utilities DEIS.

Finally, Entergy asserted that NRC staff may have included some species in its strength of connection analysis for which insufficient data were available. Entergy asserted that some species for which relatively few individuals were captured in some surveys – including bluefish, white catfish, and weakfish – should not have been included in the strength of connection analysis.

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*concurrence via e-mail

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DATE	04/21/2011	04/22/2011	05/04/2011	05/09/2011

OFFICIAL RECORD COPY

Memo to Entergy Nuclear Operations, Inc. from Andrew L. Stuyvenberg dated May 9, 2011

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