



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

July 29, 2011

LICENSEE: Entergy Nuclear Operations, Inc.

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

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALLS HELD ON JUNE 20, JUNE 22, AND JUNE 29, 2011, REGARDING THE ONGOING ENDANGERED SPECIES ACT CONSULTATION FOR THE PROPOSED INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3 LICENSE RENEWAL

The U.S. Nuclear Regulatory Commission (NRC or the staff) participated in telephone conferences on June 20, June 22, and June 29, 2011, as part of the ongoing Endangered Species Act consultation process with the National Marine Fisheries Service and Entergy Nuclear Operations, Inc. (Entergy).

Enclosure 1 contains a participant list and summary of the June 20 teleconference, Enclosure 2 contains a participant list and summary of the June 22 teleconference, and Enclosure 3 contains a participant list and summary of the June 29 teleconference.

A handwritten signature in black ink, appearing to read "Andrew L. Stuyvenberg", is positioned above the typed name.

Andrew L. Stuyvenberg, Environmental 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/encls: Listserv

**Teleconference Regarding
Indian Point Endangered Species Act Consultation
June 20, 2011**

PARTICIPANTS

<u>Name</u>	<u>Affiliation</u>
Julie Crocker	National Marine Fisheries Service (NMFS)
Julie Williams	NMFS
Briana Balsam	Nuclear Regulatory Commission (NRC)
Sherwin Turk	NRC
Drew Stuyvenberg	NRC

**Teleconference Regarding
Indian Point Endangered Species Act Consultation
June 20, 2011**

Summary

National Marine Fisheries Service (NMFS) staff requested a telephone conference with NRC staff to discuss the NRC's regulatory authority as it relates to the Endangered Species Act and NMFS's eventual biological opinion.

NMFS indicated that it understands that the NRC defers to either state-level or U.S. Environmental Protection Agency (EPA) authority under the Clean Water Act to regulate power plant intakes and discharges for issues like impingement and entrainment. NRC staff affirmed this understanding. NMFS indicated that it would consider reasonable and prudent measures to protect the shortnose sturgeon that fall within NRC's statutory authority.

NRC staff indicated that operating licenses may, in some cases, contain references to NMFS biological opinions or to Endangered Species Act matters. NRC staff indicated that it would review Indian Point Unit 2 and 3's existing licenses for requirements related to the Endangered Species Act.

NMFS indicated that it has some potential information needs, and would like a teleconference later in the week that would also include Entergy. NMFS indicated that it may need additional analysis from the NRC related to thermal information that Entergy indicated had just been posted on the New York Department of Environmental Conservation's website (at <http://www.dec.ny.gov/permits/57609.html>). Regardless of whether NRC would submit a new analysis, NMFS indicated that it would likely need to request an extension of time for the consultation so that NMFS can address its informational needs.

**Teleconference Regarding
Indian Point Endangered Species Act Consultation
June 22, 2011**

PARTICIPANTS

<u>Name</u>	<u>Affiliation</u>
Julie Crocker	National Marine Fisheries Service (NMFS)
Julie Williams	NMFS
Kelli Dowell	Entergy Nuclear Operations, Inc. (Entergy)
Rick Buckley	Entergy
John Curry	Entergy
Dara Gray	Entergy
Fred Dacimo	Entergy
Sal Zullo	Entergy
Charlie Caputo	Entergy
Elise Zoli	Goodwin Proctor/Entergy
Mark Mattson	Normandeau Associates/Entergy
Katherine Sutton	Morgan Lewis/Entergy
Briana Balsam	Nuclear Regulatory Commission (NRC)
Dennis Logan	NRC
Sherwin Turk	NRC
Drew Stuyvenberg	NRC

**Teleconference Regarding
Indian Point Endangered Species Act Consultation
June 22, 2011**

Summary

NMFS, in the June 20 teleconference with NRC staff, indicated that it may require a follow-up teleconference with the NRC and Entergy to address NMFS's informational needs in the ongoing Endangered Species Act Section 7 consultation related to the proposed license renewal of Indian Point Nuclear Generating Unit Numbers 2 and 3. This teleconference was convened to address NMFS's informational needs.

The parties first discussed the need for an extension of time for the consultation process to address NMFS's informational needs. Pursuant to 50 CFR 402.14(g), the applicant (in this case, Entergy) would need to provide written consent for any extension. The parties briefly discussed a possible extension timeline, and agreed that NMFS would propose an extension in the days after the teleconference.

The NRC staff indicated to NMFS that it would convey copies of the Indian Point Environmental Protection Plans (EPPs) for Units 2 and 3 to NMFS. The EPPs are a set of requirements that pertain to environmental protection that are part of the Unit 2 and 3 licenses, and contain reference to Endangered Species Act matters.

NMFS indicated that it would need time to review the thermal information Entergy indicated is now publicly available on New York State Department of Environmental Conservation's website (at <http://www.dec.ny.gov/permits/57609.html>).

NMFS presented several questions to Entergy. First, NMFS inquired about the spacing of trash bars at Indian Point. Entergy indicated that the trash bars are 3.5 inches (in.) apart on center, and the openings between the bars are 3 in. wide. The trash bars span both Unit 2 and Unit 3 intakes, and each intake is covered by separate top and bottom sections. Each section is 14 feet (ft) high. Unit 2 has a plate at the top of the trash racks to prevent debris from floating over the top, while Unit 3 has a chain-link fence at the top to prevent debris from floating over the top.

NMFS asked how often Entergy cleaned the trash racks. Entergy indicated that it cleans the racks twice a year: once in May after the ice melts and once in November. In response to NMFS's follow-up question, Entergy indicated that the racks are not checked on a daily basis.

Also in response to NMFS questions, Entergy indicated that previous plant owners monitored for sturgeon from 1974 to 1990, but the previous owners stopped monitoring after the Ristroph screens were installed. The previous owners found that the Ristroph screens substantially increased survival rates of impinged sturgeons, and they also found more harm to sturgeons from sampling for impingement than in normal operations with the Ristroph screens. Entergy also indicated that it had not planned any future impingement monitoring because EPA had indicated that Entergy's Ristroph screens were state-of-the art.

In response to NMFS's question about whether it is possible to monitor screens or racks at Indian Point, Entergy suggested that it could use existing data plus Long-River Survey data to provide an "atlas of exposure" that takes into account sturgeon distribution and likelihood of exposure to Indian Point, and provide data that may be superior to actual monitoring. Entergy suggested that perhaps an annual report could be part of such a solution. NMFS indicated that such a report may be an option.

NMFS also inquired about impingement and entrainment effects for sturgeon prey species. Entergy staff indicated that, as Indian Point is located at the boundary of salt and fresh water, the Hudson River there is too salty for wedge mussels and too fresh for marine mussels. Further, Entergy indicated it has historic biofouling information available should NMFS require it. Regarding other benthic invertebrates, Entergy indicated that there may have been an entrainment study on Gammarid amphipods in the 1970s, though amphipods were typically not classified in impingement and entrainment studies. Entergy also noted that sturgeon spawning and nursery areas are north of Indian Point, near Kingston.

Finally, Entergy indicated that there may have been some studies on benthic invertebrate communities in the river in the 1990s to 2000s, but researchers could only get to the perimeter of the Indian Point security zone, which extends 400 ft into the River along 900 ft of shoreline adjacent to Indian Point.

Following NMFS's informational inquiries to Entergy, the parties agreed that NMFS could furnish a request for extension via letter or e-mail and that Entergy would be able to respond in the same format. The extended schedule will include a timeline for a supplement to NRC's biological assessment as well as an opportunity for the NRC and Entergy to comment on NMFS's draft biological opinion.

The meeting closed with Entergy confirming that NMFS intended to provide additional questions on thermal studies, confirming that NMFS had all the information it needed related to the Indian Point trash racks, and confirmed that it would plan to follow up with NMFS to address benthic invertebrate questions including providing, to the extent available, a list of benthic invertebrate studies.

**Teleconference Regarding
Indian Point Endangered Species Act Consultation
June 29, 2011**

PARTICIPANTS

<u>Name</u>	<u>Affiliation</u>
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Kelli Dowell	Entergy Nuclear Operations, Inc. (Entergy)
Rick Buckley	Entergy
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John Fitzgerald	Entergy
Charlie Caputo	Entergy
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Mark Mattson	Normandeau Associates/Entergy
Paul Bessette	Morgan Lewis/Entergy
John Rund	Morgan Lewis/Entergy
Briana Balsam	Nuclear Regulatory Commission (NRC)
Dennis Logan	NRC
Sherwin Turk	NRC
Drew Stuyvenberg	NRC

**Teleconference Regarding
Indian Point Endangered Species Act Consultation
June 29, 2011**

Summary

NRC staff convened this teleconference to solidify a schedule for the proposed Endangered Species Act consultation extension. NMFS had proposed a schedule to which both NRC and Entergy had proposed modifications.

The parties agreed on the following schedule, which is based on Entergy providing information to NRC and NMFS.

T (likely July 5; not before July 5) – Entergy submits information on benthic resources in the action area as discussed on the June 22 teleconference (i.e., information on the biofouling community at the IP intakes, information on the entrainment of amphipods and published studies related to the distribution of the benthic community in the Hudson River). Entergy is also to provide to NRC any relevant thermal information for NRC's revised biological assessment (BA).

T+20 calendar days (likely July 25, depending on T) – NRC staff submits BA supplement to NMFS focusing on the assessment of the thermal discharge on shortnose sturgeon.

One month after NRC submits BA supplement to NMFS (likely August 25) - NMFS provides a draft biological opinion (BO) to NRC. In completing its BO, NMFS will: (a) review the information provided in the supplemental BA, (b) incorporate the new information on the thermal plume (Swanson et al. 2011, and other sources of information as appropriate) into the draft BO, (c) incorporate additional technical information provided by Entergy on the June 22 conference call, (d) make a draft determination as to whether the proposed action is likely to jeopardize the continued existence of shortnose sturgeon and provide justification for this determination, (e) prepare a draft incidental take statement with draft terms and conditions and reasonable and prudent measures, as appropriate. Following receipt of the BO, it is NMFS's understanding that the NRC will distribute the draft BO to Entergy and request that Entergy's comments be submitted to the NRC for transmittal to NMFS pursuant to 50 CFR 402.14(g)(5).

Ten calendar days after NMFS provides a draft BO to NRC (likely September 6 – first working day after Labor Day) - NRC provides comments from NRC and from Entergy, if any, on the draft BO to NMFS.

If there are no substantive comments, then NMFS prepares the final BO within several days of September 6 (within three working days). If NRC or Entergy submits substantive comments, then NMFS will either prepare a final BO within ten working days (September 20) or NMFS will notify NRC and Entergy of a need for additional time.

July 29, 2011

LICENSEE: Entergy Nuclear Operations, Inc.

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

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/RA/

Andrew L. Stuyvenberg, Environmental Project
Manager
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Division of License Renewal
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Docket Nos. 50-247 and 50-286

Enclosures:
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DATE	7/28/11	7/29/11	7/29/11	7/29/11

OFFICIAL RECORD COPY

Memorandum to Entergy Nuclear Operations Inc. from A. L. Stuyvenberg dated July 29, 2011

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