



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

March 6, 2017

Ms. Kimberly Damon-Randall  
Assistant Regional Administrator for Protected Resources  
National Marine Fisheries Service  
Greater Atlantic Regional Fisheries Office  
55 Great Republic Drive  
Gloucester, MA 01930-2276

SUBJECT: NEW INFORMATION RELEVANT TO ONGOING SECTION 7 CONFERENCE FOR INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3 RELATED TO THE NATIONAL MARINE FISHERIES SERVICES' PROPOSED RULE TO LIST ATLANTIC STURGEON CRITICAL HABITAT IN THE HUDSON RIVER

Dear Ms. Damon-Randall:

I am writing to provide you with new information related to Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and IP3) that is relevant to the ongoing conference between the U.S. Nuclear Regulatory Commission (NRC) and National Marine Fisheries Service (NMFS) pursuant to Section 7 of the Endangered Species Act of 1973, as amended (ESA). This new information concerns (1) data on Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) use of the Hudson River in the vicinity of IP2 and IP3 provided to NRC by Goodwin Proctor LLP (Goodwin Proctor) in letters dated October 14, 2016, and January 13, 2017, and (2) an agreement made between Entergy Nuclear Operations, Inc. (Entergy), New York State, and other signatories, dated January 8, 2017, that, among other terms, commits Entergy to permanently cease operations of IP2 and IP3 by 2020 (IP2) and 2021 (IP3) and in no event beyond 2024 (IP2) and 2025 (IP3).

#### Section 7 Conference Background

On June 3, 2016, the NMFS published a proposed rule to list critical habitat for the Atlantic sturgeon. If listed as proposed, the entire portion of the Hudson River affected by IP2 and IP3 operations will be designated as critical habitat of the New York Bight distinct population segment (DPS) of Atlantic sturgeon. By letter dated September 13, 2016, the NRC requested to initiate a conference with NMFS under ESA Section 7 to address the potential impacts of IP2 and IP3 on the proposed critical habitat. The NRC included with its request an evaluation (herein referred to as the "Evaluation") that concluded that continued operation of IP2 and IP3 under the terms of the original licenses and under the likely terms of renewed licenses, if granted by the NRC, "may affect, but is not likely to destroy or adversely modify" proposed critical habitat of the New York Bight DPS of Atlantic sturgeon.

#### New Information from Entergy Concerning Atlantic Sturgeon Use of the Hudson River

By letters dated October 14, 2016 (ADAMS Accession No. ML16294A281) and January 13, 2017 (ADAMS Accession No. ML17052A316), Goodwin Proctor, on behalf of Entergy, submitted to NRC information which it requested to be considered as part of the Section 7 conference between NRC and NMFS.

Goodwin Proctor's October 14, 2016, letter includes comments on the NRC's Evaluation from Entergy's contractors (Mark T. Mattson, Ph.D. of Normandeau Associates, Inc. and John Young, Ph.D. of ASA Analysis & Communication, Inc.). In its comments, Entergy's contractors generally disagree with statements in the NRC's Evaluation that suggest that the IP2 and IP3 action area could support Atlantic sturgeon larvae in late summer; the Evaluation's assessment of potential impacts on Atlantic sturgeon prey from impingement and entrainment; the Evaluation's assessment of the potential impacts of water withdrawals on proposed critical habitat; and the Evaluation's characterization of the types of thermal impacts that could occur during operations.

Following a detailed review of these comments, the NRC staff finds that the majority of the comments are ultimately disagreements with statements in the NMFS's January 30, 2013, biological opinion for continued operation of IP2 and IP3 (ADAMS Accession No. ML13032A256), which the NRC frequently cites in its Evaluation. Because the NRC recognizes NMFS to have special expertise with respect to Atlantic sturgeon and other federally listed species under its jurisdiction, the NRC finds it appropriate to rely on information contained in the biological opinion that relates to life history characteristics and potential impacts to aquatic species that could result from continued operations of IP2 and IP3. As such, the NRC staff does not find Entergy's contractors' comments to warrant revision to the Evaluation to the extent that those comments disagree with NMFS's expert opinion as documented in the biological opinion.

The NRC staff does, however, make the following correction to the "Water Withdrawals" section on page 10 of the Evaluation:

Regarding water use, IP2 and IP3 could physically remove roughly ~~16 to 27~~ 1.7 percent of the habitat from the Hudson River aquatic environment based on average annual river flow data from the past five water years and assuming operation at 100 percent of the licensed thermal power level.

In its comments, Entergy's contractors corrected the above calculation to account for tidal flows and additional freshwater inputs. The NRC accepts this corrected calculation and requests that NMFS consider 1.7 percent rather than the 16 to 27 percent that NRC originally stated in the Evaluation.

Goodwin Proctor's October 14, 2016, letter also provides the NRC with a copy of Goodwin Proctor's comments on NMFS's proposed critical habitat rule, which Goodwin Proctor had previously submitted to NMFS in a letter dated September 1, 2016 (ADAMS Accession No. ML16294A281). Goodwin Proctor's January 13, 2017, letter provides additional information that relates to the proposed rule. While the NRC staff finds both Goodwin Proctor's September 1, 2016, comments to NMFS and its January 13, 2017, letter to NRC to contain relevant information concerning Atlantic sturgeon habitat use in the Hudson River, the two letters primarily concern whether NMFS should designate critical habitat in the vicinity of the IP2 and IP3 Safety and Security Zone (SSZ) based on available river monitoring data rather than how continued operation of IP2 and IP3 could affect critical habitat, as proposed, which includes the full bank width of the Hudson River within the vicinity of IP2 and IP3. As discussed below, the NRC staff does not consider these comments to warrant revision to the Evaluation. Under the ESA, the NRC must consider potential impacts to critical habitat within the boundaries specified

by NMFS in the proposed rule and cannot speculate as to what the critical habitat boundaries may or should be in the final rule.

While the NRC staff believes that Goodwin Proctor's information may be helpful to NMFS in its formulation of the final critical habitat rule, the NRC does not find revisions to its Evaluation to be warranted. Rather, the information further supports NRC's conclusion of "may affect, but is not likely to destroy or adversely modify." For instance, the January 13, 2017, letter explains that Entergy's contractors reviewed ten years of acoustic tracking data obtained from NMFS and the New York State Department of Environmental Conservation and determined that Atlantic sturgeon juveniles, subadults, and adults are not typically found in the immediate vicinity of IP2 and IP3 or its SSZ. Entergy's contractors used this information to evaluate whether the IP2 and IP3 SSZ contains physical or biological features ("essential features") that support the life history needs of the Atlantic sturgeon and concluded that the lack of recorded Atlantic sturgeon occurrences in the IP2 and IP3 SSZ indicates that this area is unlikely to support the essential features identified by NMFS in its proposed critical habitat rule. If, as Entergy's contractors assert, the IP2 and IP3 action area does not contain essential features, this fact supports NRC's conclusion that continued operation of IP2 and IP3 is unlikely to destroy or adversely modify proposed critical habitat because actions associated with the proposed action, such as continued water withdrawals and discharges, would have little likelihood of noticeably or measurably impacting essential features if those features do not occur in the vicinity of the intake and discharge. The NRC requests that the NMFS consider the data included with Goodwin Proctor's comments on the proposed critical habitat rule in letters dated September 1, 2016, and January 13, 2017, in the ongoing Section 7 conference to the extent that NMFS finds it reasonable and appropriate to do so.

#### Indian Point Agreement

On January 8, 2017, Entergy, New York State, and other signatories reached an agreement (ADAMS Accession No. ML17011A149) that commits Entergy to permanently ceasing IP2 and IP3 operations no later than 2020 (IP2) and 2021 (IP3) and in no event beyond April 30, 2024 (IP2) and April 30, 2025 (IP3). The agreement also includes terms providing for the State's completion of a Coastal Zone Management Act consistency review, the State's issuance of a renewed State Pollutant Discharge Elimination System permit and a Water Quality Certificate under the Clean Water Act, and the resolution of ongoing NRC and State legal proceedings.

Pursuant to the agreement, on February 8, 2017, Entergy submitted to NRC an amendment to its pending license renewal application that modified the proposed term of the renewed licenses from 20 years for each unit to the periods ending April 30, 2024 (IP2), and April 30, 2025 (IP3) (ADAMS Accession No. ML17044A005). Although the agreement specifies that IP2 and IP3 cease operations by 2020 and 2021, respectively, the agreement also allows that if New York State determines that an emergency exists by reason of war, terrorism, a sudden increase in the demand for electric energy, or a sudden shortage of electric energy or of facilities for the generation or transmission of electric energy, the operation of IP2 and IP3 may be extended by mutual agreement of New York State and Entergy to a date no later than April 30, 2025. Thus, the time frame specified in Entergy's amendment request to the NRC allows IP2 and IP3 to

operate for this additional timeframe in the event that New York State determines an emergency exists as specified in the agreement.

Based on the above information, the NRC staff makes the following update to the "Proposed Action" section on page 1 of the Evaluation:

The proposed action is the continued operation of IP2 and IP3 under the terms of the original licenses and the continued operation of IP2 and IP3 under the terms of renewed licenses, if granted by the NRC. The IP2 license was set to expire in September 2013, and the IP3 license was set to expire in December 2015. However, having met the requirements of section 2.109 of Title 10 of the Code of Federal Regulations (10 CFR 2.109), the facility is allowed to continue to operate under the existing licenses until the NRC reaches a decision on Entergy's license renewal application. If approved, the license renewal would allow IP2 and IP3 to operate through ~~2033 and 2035~~ April 30, 2024 and April 30, 2025, respectively.

### Conclusion

Following your review of this information, the NRC staff would like to hold a teleconference with your staff to discuss any additional information you may need to complete the Section 7 conference and to discuss a timeline for doing so. The NRC understands that you will need to coordinate this review in conjunction with the NMFS's timeline for issuing the final Atlantic sturgeon critical habitat rulemaking. Please contact Briana Grange, Biologist, by phone at 301-415-1042 or by e-mail at [briana.grange@nrc.gov](mailto:briana.grange@nrc.gov), to schedule the teleconference or to discuss any other question you may have about this letter.

Sincerely,

*/RA/*

Jeffrey J. Rikhoff, Acting Chief  
Environmental Review and Project  
Management Branch  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure:  
As stated

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Jeffrey J. Rikhoff, Acting Chief  
 Environmental Review and Project  
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Enclosure:  
 As stated

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**ADAMS Accession No.:** ML17034A480

*\*concurred via email*

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<b>DATE</b>	02/16/2017	02/21/2017	03/01/2017	02/28/2017	03/03/2017	03/06/2017

**OFFICIAL RECORD COPY**

Letter to Kimberly Damon-Randall from Jeffrey Rikhoff dated March 6, 2017

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