UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	Docket Nos.
)	50-247-LR
Entergy Nuclear Operations, Inc.)	and 50-286-LR
(Indian Point Nuclear Generating)	
Units 2 and 3))	
)	

RIVERKEEPER INC. CONSOLIDATED MOTION FOR LEAVE TO FILE A NEW CONTENTION AND NEW CONTENTION CONCERNING NRC STAFF'S FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

Filed February 3, 2011

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PRELIMINARY STATEMENT

In accordance with the Atomic Safety and Licensing Board's ("ASLB") Order dated December 27, 2010, ¹ Riverkeeper Inc. ("Riverkeeper") hereby submits the following new contention based on the Final Supplemental Environmental Impact Statement ("FSEIS") issued by the Staff of the Nuclear Regulatory Commission ("NRC") on December 3, 2010.

RIVERKEEPER CONTENTION EC-8: INADEQUATE CONSIDERATION OF ENVIRONMENTAL IMPACTS TO ENDANGERED AND THREATENED AQUATIC SPECIES

I. Specific Statement of Contention Pursuant to 10 C.F.R. § 2.309(f)(1)(i)

10 C.F.R. § 2.309(f)(1)(i) requires that proffered contentions include "a specific statement of the issue of law or fact to be raised or controverted." Riverkeeper Contention EC-8 asserts the following: NRC Staff's FSEIS is deficient for failure to include or consider the assessment of the National Marine Fisheries Service ("NMFS") regarding impacts to endangered species due to incomplete ESA § 7 consultation procedures. A supplemental EIS must be prepared by NRC Staff that fully considers the outcome of the consultation process, including NMFS' forthcoming biological opinion, prior to any decision by the NRC regarding whether to relicense Indian Point.

II. Explanation of Basis for the Contention Pursuant to 10 C.F.R. § 2.309(f)(1)(ii)

Riverkeeper hereby offers the following "brief explanation of the basis for the contention," in accordance with 10 C.F.R. § 2.309(f)(1)(ii):

A. <u>Legal Requirements of Endangered Species Act § 7 Consultation</u>

The Endangered Species Act ("ESA") provides that

¹ See Order (Granting Intervenor's Unopposed Joint Motion for an Extension of Time) (Dec. 27, 2010) (extending the deadline for filing new or amended contentions based on significantly new data or conclusions in the FSEIS to Feb. 3, 2011).

[e]ach Federal agency shall, in consultation with . . . the Secretary [of the Interior or Commerce as appropriate], insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined . . . to be critical."

ESA § 7, 16 U.S.C. § 1536(a)(2) (2010). NMFS, a section of the National Oceanic and Atmospheric Administration ("NOAA"), is an agency within the Department of the Commerce with which Federal agencies must consult. *See* NOAA Fisheries Office of Protected Resources, Interagency Consultations (ESA Section 7), http://www.nmfs.noaa.gov/pr/consultation/ (last visited Feb. 3, 2011).

The Endangered Species Act initially requires Federal agencies to request information from NMFS on "whether any species which is listed or proposed to be listed may be present in the area of [the] proposed action." ESA § 7, 16 U.S.C. § 1536(c)(1); see also 50 C.F.R. § 402.12(c). If NMFS advises that any such species may be present, the Federal agency "shall conduct a biological assessment ["BA"]. ESA § 7, 16 U.S.C. § 1536(c)(1). ESA regulations provide that "[t]he Federal agency . . . shall complete the biological assessment within 180 days after its initiation (receipt of or concurrence with the species list)." 50 C.F.R. § 402.12(i). The BA "shall evaluate the potential effects of the action on listed and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action." *Id.* § 402.12(a). The BA is used in determining whether formal consultation is necessary. *Id.* §§ 402.12(a), (k). If the Federal agency determines that the proposed action is likely to adversely affect a listed species or critical habitat, then the Federal agency must initiate formal consultation. *Id.* § 402.14.

During formal consultation, NMFS must review all relevant information, evaluate the current status of the relevant listed species, evaluate the effects of the proposed action and cumulative effects on the listed species, formulate an opinion regarding whether the proposed action is likely to jeopardize the continued existence of the listed species, formulate discretionary conservation recommendations that would reduce or eliminate the impacts of the proposed action on listed species, formulate a statement concerning any incidental take of the listed species, ² and formulate an opinion regarding any reasonable and prudent alternatives to the proposed project and reasonable and prudent measures that could be taken. *See id.* § 402.14(g).

Formal consultation concludes when NMFS issues a "biological opinion" ("BO"). *See id.* § 402.14(l). After a Federal agency initiates consultation, NMFS has 135 days to issue its BO. *See id.* § 402.14(e) ("Formal consultation concludes within 90 days after its initiation" and NMFS then has "45 days after concluding formal consultation" to "deliver a biological opinion to the Federal agency and any applicant."). Once NMFS issues its BO, "the Federal agency shall determine whether and in what manner to proceed with the action in light of its section 7 obligations and the Service's biological opinion." *Id.* § 402.15.

Moreover, while consultation with NFMS is ongoing, ESA Section 7(d) prohibits the Federal agency or project applicant from making an "irreversible or irretrievable" commitment of resources "which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative" to the agency action. 16 U.S.C. § 1536(d). This debarment is effective upon initiation of consultation and continues until consultation is concluded. *Id.*; 50 C.F.R. § 402.09.

² A statement from NMFS concerning any incidental take must specify the amount or extent of the impact, any "reasonable and prudent measures that the Director considers necessary or appropriate to minimize such impacts," and any "terms and conditions (including but not limited to, reporting requirements) that must be complied with by the Federal agency or any applicant to implement [such] measures." 50 C.F.R. § 402.14(i).

B. NRC Staff's Obligation Pursuant to NEPA to Assess Impacts to Endangered Species

Renewing the operating license of a nuclear power plant is an action that triggers the National Environmental Policy Act's ("NEPA") requirement for a comprehensive environmental review and preparation of an environmental impact statement. *See* 10 C.F.R. § 51.1 (environmental protection regulations of 10 C.F.R. Part 51 implementing NEPA Section 102(2)³ "applicable to NRC's domestic licensing and related regulatory functions"). NRC employs a Generic Environmental Impact Statement which (1) contains generic analyses of various "Category 1" issues that are applicable during all license renewal proceedings, and (2) delineates certain "Category 2" issues that require site specific review during individual license renewal proceedings. *See* 10 C.F.R. Part 51, Table B-1 of Appendix B to Subpart A; NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants ("GEIS").

The impacts of license renewal on threatened or endangered species is a "Category 2" issue that requires such site specific review during individual relicensing proceedings. *See* 10 C.F.R. Part 51, Table B-1 of Appendix B to Subpart A; GEIS § 3.9 ("Because compliance with the Endangered Species Act cannot be assessed without site-specific consideration of potential effects on threatened and endangered species, it is not possible to determine generically the significance of potential impacts to threatened and endangered species. This is a Category 2 issue."). The NRC's regulations further acknowledge that "consultation with appropriate agencies would be needed at the time of license renewal to determine whether threatened or endangered species are present and whether they would be adversely affected." 10 C.F.R. Part 51, Table B-1 of Appendix B to Subpart A.

³ NEPA § 102 is the provision triggering the preparation of detailed environmental impact statements for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332.

C. Coordinating § 7 Consultation with Reviews Pursuant to NEPA

The ESA states that biological assessments "may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of . . . NEPA." 16 U.S.C. § 1536(c)(1); see also Sierra Forest Legacy v. United States Forest Serv., 652 F. Supp. 2d 1065, 1071 (N.D. Cal. 2009) (acknowledging that a "BA may be conducted as part of the agency's NEPA-compliant EIS"). Federal regulations implementing the ESA also contemplate coordination of the consultation process with environmental reviews pursuant to NEPA. See 50 C.F.R. § 402.06(a) ("Consultation, conference, and biological assessment procedures under section 7 may be consolidated with interagency cooperation procedures required by other statutes, such as the National Environmental Policy Act. . . . The Service will attempt to provide a coordinated review and analysis of all environmental requirements.").

NMFS guidance on the consultation process further explains how

[f]ormal consultation and the Services' preparation of a biological opinion often involve coordination with the preparation of documents mandated by other environmental statutes and regulations, including . . . NEPA. . . . The Services should assist the action agency or applicant in integrating the formal consultation process into their overall environmental compliance. A major concern of action agencies is often the timing of the consultation process in relation to their other environmental reviews. For example, since the time required to conduct formal section 7 consultation may be longer than the time required to complete preparation of NEPA compliance documents, the action agency should be encouraged to initiate informal consultation prior to NEPA public scoping. Biological assessments may be completed prior to the release of the Draft Environmental Impact Statement (DEIS) and formal consultation, if required, should be initiated prior to or at the time of release of the DEIS. Early inclusion of section 7 in the NEPA process would allow action agencies to share project information earlier and would improve interagency coordination and efficiency.

Endangered Species Consultation Handbook, *Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act*, U.S. Fish &Wildlife Service, National Marine Fisheries Service (March 1998), at 4-11, *available at* http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf (hereinafter "NMFS Consultation Handbook").

Pertinently, ESA regulations and the NMFS Consultation Handbook make it explicitly clear that "[a]t the time the Final EIS is issued, section 7 consultation should be completed" and that "[t]he Record of Decision should address the results of section 7 consultation." Id. (emphasis added); see 50 C.F.R. § 402.06(b) ("Where the consultation . . . has been consolidated with the interagency cooperation procedures required by other statutes such as NEPA ..., the results should be included in the documents required by those statutes."); Interagency Cooperation – Endangered Species Act of 1973, as Amended, Final Rule, 51 Fed. Reg. 19926 (1986) (NMFS and the U.S. Fish and Wildlife Service ("FWS") jointly enacting regulations implementing the ESA, explaining that "the biological opinion should be stated in the final environmental impact statement") (emphasis added). Indeed, only after the issuance of a BO can the Federal agency "determine whether and in what manner to proceed with the action in light of its section 7 obligations and the Service's biological opinion." 50 C.F.R. § 402.15; see also ESA § 7(d), 16 U.S.C. § 1536(d) (prohibiting agency action that forecloses formulation of reasonable measures/alternatives while consultation is ongoing). This settled and proper approach is further demonstrated by numerous instances where ESA § 7 consultation processes were concluded well prior to the completion of a concurrent NEPA review process, and where a

⁴ The final rule explains that "[a] statement of the opinion may be a summary of its findings and conclusions" although "[t]he Service does feel that the entire opinion should be attached as an exhibit to the NEPA document if completion time permits." Interagency Cooperation – Endangered Species Act of 1973, as Amended, Final Rule, 51 Fed. Reg. 19926 (1986).

BO prepared by NMFS (or FWS) was incorporated into the final EIS and formed part of the basis for the Federal agency's final decision making.⁵

D. NRC Staff's Incomplete Consultation Process Concerning the License Renewal of Indian Point

In the instant proceeding, the proposed Federal agency action of renewing the operating license of the Indian Point nuclear power plant triggered the consultation obligations of ESA § 7. Thus, "the NRC staff requested, in a letter dated August 16, 2007 . . . that . . . NMFS provide information on federally listed endangered or threatened species . . . that may occur in the vicinity of IP2 and IP3." DSEIS, Appendix E at E-88; 50 C.F.R. § 402.12(c). NMFS responded on October 4, 2007, identifying "two Federally protected sturgeon species under its jurisdiction as having the potential to be affected by the proposed action." FSEIS at 4-57. As such, NRC prepared a BA. *See* ESA § 7, 16 U.S.C. § 1536(c)(1).

NRC's BA, dated December 2008, was prepared as a part of the Draft Supplemental Environmental Impact Statement ("DSEIS") relating to the license renewal of Indian Point. *See* DSEIS at 4-50 ("Because the NRC recognizes that there is the potential that the continued operation of IP2 and IP3 could adversely affect the Federally listed species shortnose sturgeon (*Acipenser brevirostrum*), the NRC staff has prepared a biological assessment (BA) for NMFS

⁵ See, e.g., National Parks & Conservation Ass'n v. U.S. Dep't of Transportation, 222 F.3d 677, 679, 682 (9th Cir. 2000) (BA and BO prepared pursuant to ESA both incorporated into Federal agency's Final EIS, forming part of the basis for agency's informed decision, which satisfied NEPA); Miccosukee Tribe of Indians of Fla. V. U.S. Army Corp. of Eng'rs, 509 F. Supp. 2d 1288, 1294 (S.D. Fla. 2007) (Army Corp appending BO to final supplemental EIS and pointing to "years of consultation and cooperation with the FWS which preceded the FSEIS" to justify its environmental analysis; Court finding that "the analysis in the FSEIS, including the attached BiOpp, [biological opinion] is sufficient") (emphasis added); Nw. Envtl. Advocates v. NMFS, 2005 U.S. Dist. LEXIS 41828, *6 (W.D. Wash. 2005) (Federal agency "solicited comments on its draft FSEIS, including the NMFS Biological Opinion. After considering and responding to the public comments, the Corps issued its FSEIS"); Seattle Audubon Society v. Lyons, 871 F. Supp. 1291, 1305, 1314, 1320 (W. D. Wash. 1994) (FWS issued a biological opinion that was appended to the final EIS concerning a federal forest management plan, which formed part of basis for the Federal agency's final determinations).

⁶ In particular, "NMFS expressed concern that the continued operation of IP2 and IP3 could have an adverse impact on the shortnose sturgeon, an endangered species that occurs in the Hudson River. NMFS also noted that the Atlantic sturgeon (*A. oxyrinchus*) also occurs in the river and is currently a candidate for listing as threatened or endangered." FSEIS at 4-57.

that documents its review. The BA is provided in Appendix E to this draft SEIS."); *see also* DSEIS, Appendix E at E-87 to E-102. Notably, NRC Staff did not complete the environmental assessment within the 6 month timeframe contemplated by applicable regulations. The BA concluded that the "[r]enewal of the operating licenses of IP2 and IP3 to include another 20 years of operation could adversely affect the population of shortnose sturgeon in the Hudson River through impingement and thermal impacts." DSEIS, Appendix E at E-100.8

In light of this conclusion, NRC attempted to initiate formal consultation pursuant to ESA § 7 by transmitting the Draft EIS (which included the BA) to NMFS under cover of letter dated December 22, 2008. *See* Letter from M. Colligan (NMFS) to D. Wrona (NRC), Re: Biological Assessment for License Renewal of the Indian Point Nuclear Generating Unit Nos. 2 and 3 (Feb. 24, 2009), ADAMS Accession No. ML090820316 ("NMFS Feb. 24, 2009 Letter") (characterizing NRC Staff's transmittal of BA and Draft SEIS as "the initiation of formal consultation for the proposed" license renewal of Indian Point Units 2 and 3); *see also* 50 C.F.R. § 402.14 (requiring initiation of formal consultation if Federal agency determines that the proposed action is likely to adversely affect a listed species).

NMFS "completed an initial review of the BA and draft EIS," however determined that it had "not received all of the information necessary to initiate consultation." NMFS Feb. 24, 2009 Letter at 1. By letter dated February 24, 2009, NMFS outlined various categories of information which it deemed necessary "[t]o complete the initiation package" and thereby commence the

⁷ As mentioned above, ESA regulations provide that "[t]he Federal agency . . . shall complete the biological assessment within 180 days after its initiation (receipt of or concurrence with the species list)." 50 C.F.R. § 402.12(i). In this proceeding, NRC Staff received "the species list" on October 4, 2007 when NMFS identified two sturgeon species that could be affected by the proposed action, *see* FSEIS at 4-57, and, thus, should have completed its initial BA by April 2008, instead of December 2008. Issuing a BA in advance of the DSEIS would have been in accordance NMFS guidance, which is designed to ensure proper interagency coordination. *See* NMFS Consultation Handbook at 4-11.

⁸ The DSEIS recognized NRC Staff's § 7 consultation obligations, and the fact that NMFS could weigh-in on the relevant issues, however, drew conclusions regarding impacts to endangered species based solely on NRC Staff's own analysis and BA. *See* DSEIS § 4.6 (pp. 4-49 to 4-53).

formal consultation clock. *See id.* at 1-3; *see id* at 2-3 (NMFS stating that "[t]he formal consultation process for the proposed action will not begin until we [NMFS] receive all of the requested information" and indicating that once such information was received, NMFS would "outline dates within which formal consultation should be complete and the biological opinion delivered").

Thereafter, NRC Staff indicated to NMFS that they would provide the requested information via a revised BA. ⁹ On December 10, 2010, almost two years after NMFS' request for additional information, NRC Staff issued said revised BA. *See* Revised Biological Assessment of the Potential Effects on Federally Listed Endangered or Threatened Species from the Proposed Renewal of Indian Point Nuclear Generating Plant, Unit Nos. 2 and 3 (December 2010), ADAMS Accession No. ML102990043 (hereinafter "Revised BA"). The Revised BA was issued just after the NRC Staff finalized and issued its FSEIS on December 3, 2010. *See* FSEIS at 4-60 ("The NRC staff is sending a revised biological assessment (BA) of the impacts of license renewal on the shortnose sturgeon to NMFS to review as this SEIS goes to press"). ¹⁰

NRC Staff's inordinate delay in transmitting the information NMFS required necessary in the form of a Revised BA remains unexplained and unjustified in light of applicable regulations and guidance which call for the integration of the results of the ESA § 7 consultation process into a concurrent NEPA review, as discussed above. Furthermore, the Revised BA, like NRC Staff's initial BA, was not issued within the 6 month time period allotted for the preparation of a BA.

See 50 C.F.R. § 402.12(i)). 11

⁹ Riverkeeper is only aware of this commitment due to Riverkeeper's correspondence with a representative from NMFS. Indeed, there is no publicly available NRC documentation regarding NRC Staff's plan to address the information gaps identified by NMFS in February 2009.

¹⁰ Although the FSEIS indicates that "[t]he BA is provided in Appendix E to this SEIS," see FSEIS at 4-57, it does not appear to have been included. See FSEIS, Appendix E.

¹¹ While NRC Staff might point to the fact that after issuing the initial BA, it sought revised impingement data from Entergy due to discrepancies, NRC Staff received the requested data in July 2009, well before NRC Staff issued the

NRC Staff's Revised BA once again concluded that the continued operation of Indian Point could potentially adversely affect the population of shortnose sturgeon in the Hudson River. Revised BA at 14. Accordingly, provided NMFS concludes that it now has all of the information necessary to proceed with formal consultation, NMFS will have 135 days to issue a biological opinion. Thus, although NRC Staff has officially concluded its review of the environmental impacts of relicensing Indian Point with the issuance of the FSEIS, the ESA § 7 consultation process remains incomplete and ongoing.

E. NRC Staff's Inadequate FSEIS in Light of Failure to Sufficiently Consider Impacts to Endangered Species

NRC Staff's failure to timely submit a sufficient BA for NMFS' consideration¹² has resulted in a deficient FSEIS that does not include the findings, conclusions, or recommendations of NMFS relating to endangered aquatic resources present in the Hudson River. Instead, the FSEIS draws final conclusions regarding the impacts of Indian Point license renewal on endangered species based solely on NRC Staff's own analysis, uninformed by any input from NMFS. *See id.* at 4-57 to 4-60.¹³ While the FSEIS recognized that the consultation process remains open and that NMFS will render an opinion, NRC Staff did not address in any way how this very relevant, yet unwritten opinion would factor into the NRC Staff's FSEIS or NRC's final decision-making regarding the license renewal of Indian Point. *See* FSEIS at 4-60 (acknowledging that "[s]hould NMFS determine that continued operation of IP2 and IP3 has the

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Revised BA in December 2010. See Revised BA at 16. Moreover, the new impingement-related data NRC Staff used for its analysis in the Revised BA would not explain why NRC Staff did not send information responsive to NMFS' other requests for information, sooner than in the Revised BA. See NMFS Feb. 24, 2009 Letter.

12 Had NRC Staff not taken such a cavalier approach to the FSA & consultation process and complied with

¹² Had NRC Staff not taken such a cavalier approach to the ESA § consultation process and complied with applicable standards and guidance, as discussed above, consultation could have been completed in time to be incorporated into the NRC Staff's ongoing environmental review process pursuant to NEPA.

¹³ Specifically, the FSEIS concludes "that the impacts of an additional 20 years (beyond the current term) of operation and maintenance of the site on aquatic species that are Federally listed as threatened or endangered is SMALL." FSEIS at 4-60. NRC Staff arrived at this conclusion based on an analysis in the FSEIS and Revised BA of incomplete data and unsupported assumptions. *See infra* note 15.

potential to adversely impact the shortnose sturgeon, NMFS will issue a biological opinion," and that "[i]ncluded in the biological opinion would be any reasonable and prudent measures that the applicant could undertake, as well as the terms and conditions for the applicant to comply with the formal Section 7 consultation").

NRC Staff's issuance of the FSEIS without completing the ESA § 7 consultation process with NMFS clearly runs contrary to the ESA, applicable regulations and guidance, and settled practice, which, as discussed at length above, explicitly require completion of consultation procedures prior to the end of the NEPA review process. 14 NRC simply cannot make final conclusions regarding impacts to endangered species and, ultimately whether to recommend license renewal of Indian Point, without satisfying its ESA § 7 obligations and fully considering NFMS' BO. See 50 C.F.R. § 402.15 (only after the issuance of a BO can the Federal agency "determine whether and in what manner to proceed with the action in light of its section 7 obligations and the Service's biological opinion."); see also ESA § 7(d), 16 U.S.C. § 1536(d) (prohibiting agency action that forecloses formulation of reasonable measures/alternatives while consultation is ongoing). Indeed, such a regulatory scheme is the only way to ensure adequate and appropriate consideration of impacts to endangered or threatened species, and thereby comply with basic tenets of NEPA.

The fundamental purpose of NEPA is to "ensure[] that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts" and to "guarantee[] that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking

¹⁴ Completing the required BA as early as possible would have been much more consistent with NMFS guidance, which indicates that in order to ensure that formal consultation process is integrated into the project's overall environmental compliance, BA's should be completed and formal consultation initiated prior to the release of the Draft EIS. *See* NMFS Consultation Handbook at 4-11.

process and the implementation of that decision." Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 277 (2006), quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989); see also Vermont Yankee Nuclear Power Corp. V. Natural Resources Defense Council, 435 U.S. 519, 558 (1978) (explaining how NEPA seeks to ensure "a fully informed and well-considered decision"); Nw. Envtl. Advocates v. NMFS, 2005 U.S. Dist. LEXIS 41828, *6 (W.D. Wash. 2005) ("The processes established under NEPA focus the attention of both the government and the public on a proposed agency action, so that the environmental consequences can be studied prior to implementation of the proposed action, and so potential negative impacts can be avoided") (citing 40 C.F.R. § 1500.1(b); 40 C.F.R. § 1500.2(e); Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1989); Churchill County v. Norton, 276 F.3d 1060, 1072-73 (9th Cir. 2001)). Thus, an EIS prepared pursuant to NEPA must be searching and rigorous, providing a "hard look" at the environmental consequences of the agency's proposed action. Marsh, 490 U.S. at 374.

It is impossible to conclude that NRC Staff's final determinations in the FSEIS were "fully-informed" and based on the requisite "hard look," when they were not informed by *any* feedback from the ESA § 7 consultation process. Indeed, issuing the FSEIS without the benefit of NMFS' assessment effectively ensures that NRC Staff's determinations regarding impacts to endangered species and the license renewal of Indian Point will not take into account any conclusions, findings, or recommendations of the consulting agency. This completely flouts the purpose of ESA § 7, which requires consultation with NMFS so as to inform the Federal agency's decision on the action to make certain that such action will not jeopardize any endangered species. *See* 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g).

For example, as discussed above, NMFS is charged with making an independent determination regarding whether the proposed action is likely to jeopardize any endangered species, making discretionary conservation recommendations to reduce or eliminate any impacts, determining whether a take permit is necessary, and formulating an opinion regarding any reasonable and prudent alternatives to the proposed project. *See* 50 C.F.R. § 402.14(g). The opinions and recommendations from NMFS are highly critical given NRC Staff's reliance on outdated and/or incomplete information regarding impacts to sturgeon. ¹⁵ In fact, NRC Staff even recognized the "difficulties in drawing conclusions" from such incomplete information. Revised BA at 13. As such, NMFS' assessment will contain opinions that will necessarily inform the relevant concerns, including opinions and conclusions that may well differ from those of NRC Staff, and that logically should be considered before NRC Staff arrives at any final conclusions about impacts to endangered species and, in turn, whether license renewal of Indian Point is

¹⁵ The Revised BA found that "continued thermal effects from operation of IP2 and IP3 for an additional 20 years could potentially adversely affect the population of shortnose sturgeon in the Hudson River through thermal discharge," however NRC Staff was "unable to determine the extent to which the [shortnose sturgeon] population would be affected" by thermal discharges due to lack of appropriate thermal modeling. Revised BA at 14. Moreover, while the Revised BA concluded that "impingement and entrainment resulting from operation of IP2 and IP3 for an additional 20 years beyond the original license term are not likely to jeopardize the continued existence of the endangered shortnose sturgeon in the Hudson River," NRC Staff based their conclusions on "two-decade old impingement data and incomplete impingement mortality data." Id. at 13. NRC Staff also simply assumed, without properly explaining the basis for such assumptions, that the "installation of Ristroph screens . . . may have decreased the mortality rate of shortnose sturgeon that are impinged" and that "[a] population increase [in shortnose sturgeon] would mean that the population-level effect of taking an individual shortnose sturgeon would decrease." Id. at 11-13. Indeed, NRC Staff even acknowledges that "because more recent data are not available, the NRC staff cannot determine whether the current impingement losses are similar to the past observations." FSEIS at 4-59. NRC Staff also admits that "[w]ithout current monitoring . . . NRC Staff cannot confirm [the assumed performance of the Ristroph screens. Revised BA at 12. NMFS has already expressed concern about the lack of updated impingement data at Indian Point. See Letter from P. Colosi (NMFS) to B. Holian (NRC) Re: Essential Fish Habitat Consultation (Oct. 12, 2010), at 3, 5, 6 (appended to FSEIS at Appendix E, E-102 to E-111) (expressing concern that the decades old data NRC Staff depends upon for their analyses "may not accurately depict contemporary habitat usage of the mid-Hudson region by fishes" and that "project proponents have not evaluated the effectiveness of adaptive measures" such as the Ristroph screens, which may "not always perform the same in the field as it does in a laboratory setting" and the effectiveness of which "can vary based upon the living aquatic resource assemblages it encounters in different geographic settings"). Furthermore, aquatic biologists of Pisces Ltd, have indicated to Riverkeeper that there is no reason to believe that an increasing population of sturgeon would lead to decrease in impingement, and that, in fact, with relatively rare fish, even a small number of impingement can have a big effect. Overall, Pisces biologists continue to question the ability of the NRC Staff to draw accurate conclusions based on such obsolete data. See, e.g., Appendix A to Riverkeeper Comments on DSEIS (March 18, 2009).

appropriate. Failure to do so results in determinations by NRC Staff that do not adequately take into account adverse impacts on endangered species, which NMFS may find to be significant and "likely to jeopardize the continued existence" of such species. *See* 50 C.F.R. § 402.14(g)(4).

In sum, by issuing the FSEIS and recommending license renewal prior to NMFS performing its enumerated duties, NRC Staff has made its final conclusions without crucial input. Without meaningful consideration of NMFS' analysis pursuant to consultation procedures set forth by ESA § 7, the findings in the FSEIS in relation to impacts to endangered and threatened species lack proper foundation and are flawed and patently deficient.

III. Contention is Within the Scope of the Proceeding Pursuant to 10 C.F.R. § 2.309(f)(1)(iii)

Riverkeeper Contention EC-8 is squarely within the scope of the Indian Point license renewal proceeding, in accordance with 10 C.F.R. § 2.309(f)(1)(iii). The proffered contention challenges the adequacy of NRC Staff's assessment of the environmental impacts of continued operation of Indian Point on endangered species in the Hudson River, in light of the incomplete ESA § 7 consultation process. NRC regulations state that the impacts of license renewal on threatened or endangered species is a "Category 2" issue that requires site specific review during individual license renewal proceedings. *See* 10 C.F.R. Part 51, Table B-1 of Appendix B to Subpart A; NUREG-1437, GEIS § 3.9 ("Because compliance with the Endangered Species Act cannot be assessed without site-specific consideration of potential effects on threatened and endangered species, it is not possible to determine generically the significance of potential impacts to threatened and endangered species. This is a Category 2 issue."). The NRC's regulations further expressly acknowledge that "consultation with appropriate agencies would be needed at the time of license renewal to determine whether threatened or endangered species are present and whether they would be adversely affected. 10 C.F.R. Part 51, Table B-1 of

Appendix B to Subpart A. The proffered contention questions the adequacy of NRC Staff's compliance with these requirements, and, thus, falls clearly within the scope of the instant proceeding.

IV. Contention is Material Pursuant to 10 C.F.R. § 2.309(f)(1)(iv)

The "issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding," in accordance with 10 C.F.R. § 2.309(f)(1)(iv). The NRC must ascertain the site specific environmental impacts of license renewal on endangered or threatened species. See 10 C.F.R. Part 51, Table B-1 of Appendix B to Subpart A; GEIS § 3.9. This assessment is necessary for NRC Staff to make informed conclusions in the FSEIS, and, in turn, informed recommendations regarding the appropriateness of relicensing Indian Point. Riverkeeper Contention EC-8 is, thus, material, since it demonstrates that NRC Staff's assessment and conclusions are deficient absent the required feedback from NMFS pursuant to the consultation requirements of ESA § 7. Without the benefit of NMFS' biological opinion (which will contain NMFS' position on the impacts of the activity, potential alternatives, mitigation measures, the necessity of obtaining a take permit, etc.), NRC Staff does not have all of the information necessary to make the relevant findings regarding the license renewal of Indian Point. If the NRC renews Indian Point's operating licenses without satisfying NEPA, and Indian Point continues to operate with a once-through cooling water intake structure, the plant's operation could continue to have significant adverse impacts on threatened and endangered aquatic species, and even "jeopardize the continued existence" of such species. 50 C.F.R. § 402.14(g)(4).

V. Statement of Facts Which Support the Contention Pursuant to 10 C.F.R. § 2.309(f)(1)(v)

Riverkeeper Contention EC-8 is supported by facts demonstrating that the continued operation of Indian Point will impact endangered and threatened species in the Hudson River. Both NRC Staff's initial BA and Revised BA concluded that license renewal of Indian Point could adversely impact the population of shortnose sturgeon in the Hudson River. DSEIS, Appendix E at E-100; Revised BA at 14-15. For example, data from 1975 to 1990, the only data that exists, shows that endangered shortnose sturgeon have been consistently impinged by Indian Point, and there is no evidence to definitively suggest that such impacts have ceased since monitoring stopped. *See* Revised BA at 12 (including chart listing yearly impingement of shortnose sturgeon from 1975 to 1990, and recognizing that "NRC staff does not know the current level of impingement or the level or mortality"); FSEIS at 4-59 ("because more recent data are not available, the NRC staff cannot determine whether the current impingement losses are similar to the past observations."). ¹⁶

The proffered contention is further supported by the fact that, in light of the aforementioned impacts to endangered resources, formal § 7 consultation is required, and in this proceeding, is ongoing. In recognition of the impact continued operation of Indian Point could have on endangered aquatic resources, NRC Staff initiated formal § 7 consultation. *See* NMFS Feb. 24, 2009 Letter at 1; 50 C.F.R. § 402.14. NMFS accepted NRC Staff's request for such consultation, stating that "[c]onsultation with NOAA's National Marine Fisheries Service (NMFS) regarding the proposed license renewal is appropriate as the action may adversely affect

¹⁶ Though Entergy and NRC Staff opine that the implementation of Ristroph screens in 1991 may have resulted in reduced impingement impacts to shortnose sturgeon, there is no actual data to support such an assumption. *See* DSEIS, Appendix E at E-98; Revised BA at13; FSEIS at 4-59 ("Installation of modified Ristroph screens following the 1987-1990 monitoring period is expected to have reduced impingement levels."). NRC Staff cannot blindly conclude that screens have had any mitigating effects. NRC Staff even admits that it cannot confirm the assumed performance of the Ristroph screens. *See* Revised BA at 12.

the federal endangered shortnose sturgeon." NMFS Feb. 24, 2009 Letter at 1. NMFS has made it clear that, once it has all necessary information to proceed, it intends to undertake its various formal consultation responsibilities, culminating in the issuance of a biological opinion. *See* NMFS Feb. 24, 2009 Letter at 2 (explaining that formal consultation will commence once NMFS receives all requested information, and advising that once NMFS has said requested information, it would outline dates for completion of the consultation and issuance of its biological opinion).

The contention is also supported by the fact that NMFS' biological opinion will contain information that is directly relevant to NRC Staff's assessment of impacts to endangered species. *See* 50 C.F.R. § 402.14(g). Without consideration of such information, NRC Staff's findings and conclusions regarding endangered species and, in turn, the appropriateness of relicensing Indian Point, will remain factually and legally deficient. *See*, *e.g.*, NMFS Consultation Handbook at 4-11; 50 C.F.R. § 402.14(g), 402.15.

VI. Contention Presents a Genuine Dispute Pursuant to 10 C.F.R. § 2.309(f)(1)(vi)

There is "sufficient information to show that a genuine dispute exists" regarding a material issue of law or fact, in accordance with 10 C.F.R. § 2.309(f)(1)(vi). By issuing the FSEIS, NRC Staff has evinced a clear intention to disregard the fact that ESA § 7 consultation has yet to even substantially begin. NRC Staff explicitly acknowledges that NMFS will produce a BO that will contain its opinion and any recommendations, mitigation measures, etc., yet does not address at all how NMFS' consultation will factor into NRC Staff's NEPA assessment and determinations regarding license renewal of Indian Point. Thus, it is plain that NRC Staff is satisfied with its final conclusions in relation to impacts to endangered species in the FSEIS.

Based on NRC Staff's position and the information presented herein, there are various genuine disputes of material issues of law or fact, including: (1) whether NRC Staff's issuance of

the FSEIS prior to completion of the ESA § 7 process and issuance of NMFS' BO complies with NEPA and (2) whether the FSEIS has provided sufficient analysis of the impacts to endangered species in light of the failure to include and consider the opinions, conclusions and recommendations of NMFS.

VII. Contention is Timely Pursuant to 10 C.F.R. § 2.309(f)(2)

Riverkeeper Contention EC-8 is a contention based on the conclusions in the FSEIS that is timely pursuant to ASLB's Order Granting Intervenor's Unopposed Joint Motion for an Extension of Time (Dec. 27, 2010) ("motions to file new or amended contentions that are properly based on significantly new data or conclusions in the FSEIS will be considered timely if filed on or before February 3, 2011"). Riverkeeper must, therefore, only satisfy the requirements of 10 C.F.R. § 2.309(f)(2), which the following amply demonstrates:

A. The Contention is Based on Information Not Previously Available

Riverkeeper Contention EC-8 is based on the final conclusions in the FSEIS related to endangered species, which do not adequately take into account the opinions and recommendations of NMFS due to the incomplete status of the ESA § 7 consultation. Such information was not available until the FSEIS was issued, at which time the bases for NRC Staff's conclusions and NRC Staff's intent to not abide the outcome of the consultation process became known.

B. <u>The Contention is Based on Information that is Materially Different than Previously Available Information</u>

The established regulatory structure of ESA § 7 consultation and applicable guidance contemplate that consultation procedures are completed so as to be meaningfully considered and addressed during concurrent NEPA reviews. *See supra* pgs 5-7. NRC Staff's materially different approach in concluding the NEPA process without any consideration of the consulting

agency's input was not known until the issuance of the FSEIS. At that point, it because clear that NRC Staff intended to proceed in a manner that was materially different from what is required. Indeed, there is apparently no public documentation regarding NRC Staff's intention to respond to NMFS February 2009 requests for further information, and thereby officially commence formal consultation; there was, thus, no way of knowing how NRC Staff had proceeded until the FSEIS was issued.

C. <u>The Contention has been Submitted in Timely Fashion Based on Availability of the New Information</u>

The ASLB has ordered that "motions to file new or amended contentions that are properly based on significantly new data or conclusions in the FSEIS will be considered timely if filed on or before February 3, 2011." Order Granting Intervenor's Unopposed Joint Motion for an Extension of Time (Dec. 27, 2010). Thus, Riverkeeper Contention EC-8, filed February 3, 2011, has been submitted in a timely fashion.

CONCLUSION

For the foregoing reasons, the ASLB should admit Riverkeeper Contention EC-8 into the Indian Point license renewal proceeding.

Respectfully submitted,

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February 3, 2011

Certification pursuant to 10 C.F.R. § 2.323(b) and ASLB Scheduling Order

Pursuant to 10 C.F.R. § 2.323(b) and the ASLB's July 1, 2010 Scheduling Order ¶ G.6, I certify that I have made a sincere effort to contact the other parties in this proceeding, to explain to them the factual and legal issues raised in this motion, and to resolve those issues, and I certify that my efforts have been unsuccessful.

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