



Finding of No Significant Environmental Impact

On the Issuance of an Incidental Take Permit (Permit File No. 23148) to Exelon Generating Company, LLC, for the Continued Operation of Eddystone Generating Station

Introduction and Purpose:

The National Marine Fisheries Service (NMFS) received an application from Exelon Generating Company, LLC (herein “Exelon”) requesting an Incidental Take Permit (ITP) for take of endangered sturgeon species associated with operation of the Eddystone Generating Station (herein “Eddystone”) located in Eddystone, Pennsylvania. NMFS has a statutory responsibility to authorize take of threatened and endangered species pursuant to the Endangered Species Act (ESA), Section 10(a)(1)(B) after receipt and review of an application and if certain findings and determinations are made. In addition, the National Environmental Policy Act (NEPA), 40 Code of Federal Regulations (CFR) Parts 1500 -1508, and the National Oceanic and Atmospheric Administration (NOAA) policy and procedures¹ require all proposals for major federal actions be reviewed with respect to environmental consequences on the human environment. Therefore, NMFS conducted an environmental review of the application submitted by Exelon and determined an Environmental Assessment (EA) is appropriate for NMFS consideration whether to issue an ITP. The purpose of this document is to present the evaluation that issuance of an ITP to Exelon will not significantly impact the quality of the human environment.

Background:

Eddystone is a natural gas/fuel oil-fired electric power generating facility that operates as a peaking plant, (i.e., typically running at higher levels of generation capacity during the summer and winter periods). The facility presently consists of two natural gas/fuel oil-fired electric generating units that are steam-electric generators. Cooling water for each unit is withdrawn from the Delaware River through a cooling water intake structure (CWIS), which is located along the west shore of the River, directly in front of the Station. The operation of the CWIS is the primary aspect of the facility operations under consideration for this ITP for Eddystone due to the potential impacts to ESA-listed sturgeon. Exelon conducted entrainment sampling at Eddystone in 2005, 2006, 2016, and 2017. One Atlantic sturgeon (*Acipenser oxyrinchus*) yolk-sac larva was collected in May 2017. Thus, Exelon determined it was necessary to apply for an ITP in accordance with the requirements under Section 10(a)(1)(B) of the ESA for the take of ESA-listed shortnose sturgeon (*Acipenser brevirostrum*) and Atlantic sturgeon (New York Bight Distinct Population Segment (NYB DPS)) due to the operation of the CWIS and vessel activity associated with fuel delivery to the station.

NMFS has determined the final application and conservation plan, submitted by Exelon on June 21, 2019 (updated from original submission on June 28, 2018), is adequate and complete. NMFS is issuing an ITP to Exelon pursuant to section 10(a)(1)(B) of the ESA and the regulations

¹ National Oceanic and Atmospheric Administration Administrative Order (NAO) 216-6A “Compliance with the National Environmental Policy Act and Executive Order 12114 Environmental Effects Abroad of Major Federal Actions 11988 and 13690 Floodplain Management; and 11990 Protection of Wetlands” and the Companion Manual for NAO 216-6A.



governing the incidental taking of threatened and endangered species (50 CFR 222.307). The ITP will be valid for 10 years from the date the ITP is issued, and will authorize the incidental take of shortnose and Atlantic sturgeon during the conduct of otherwise lawful activities associated with the operation of Eddystone.

Since NMFS's proposed action is a direct outcome of Exelon's request for a permit to take ESA-listed sturgeon incidental to conducting an otherwise lawful activity, the purpose of NMFS's action is to evaluate Exelon's application pursuant to Section 10(a)(1)(B) of the ESA. The need for NMFS's action is to meet its obligation to grant or deny the permit request under the ESA. Exelon submitted an adequate and complete application demonstrating the potential eligibility for the ITP, thus NMFS has a corresponding duty to determine whether and how to authorize take of the ESA-listed sturgeon incidental to the activities described in the application.

To authorize take of ESA-listed species, NMFS evaluates the application to determine if the taking is incidental to, not the purpose of, an otherwise lawful activity and that, the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. NMFS also evaluates the best available scientific information to determine whether the mitigation proposed by the applicant, to the maximum extent practicable, will minimize and mitigate the impacts of such taking and whether any additional conservation measures are required to ensure that the taking will not jeopardize the survival and recovery of the ESA-listed species and that the applicant can ensure adequate funding to implement its commitments under the conservation plan and ITP. NMFS cannot issue an ITP if these criteria cannot be met.

Analysis Summary:

The environmental consequences to the marine environment and protected resources are important to the evaluation leading to the decision to issue any given ITP. In particular, because NMFS's action is specific to authorizing take of ESA-listed species, the key factors relevant to, and considered in a decision to issue any given ITP, are related to NMFS statutory mission under the ESA. Based on the statutory framework noted above, NMFS considered two alternatives, a no action alternative in which NMFS denies Exelon's request for the ITP and an action alternative in which it grants the request and issues the ITP. Thus, the EA addresses the potential environmental impacts of two alternatives to meet NMFS's purpose and need:

- 1) Alternative 1 (No Action Alternative): For NMFS, denial of an ITP constitutes the NMFS No Action Alternative, which is consistent with our statutory obligation under the ESA to grant or deny incidental take requests and to prescribe mitigation, monitoring, and reporting with any ITP. Under the No Action Alternative, NMFS would not issue the ITP and in which case we assume Exelon would continue to operate the facility as described in the application without implementing the full suite of specific mitigation measures, monitoring, and reporting explained in the conservation plan, which would be required in the ITP. The No Action Alternative served as a baseline against which the impacts of the Preferred Alternative were compared and contrasted.
- 2) Alternative 2 (Preferred Alternative): NMFS issues the ITP to Exelon authorizing take of ESA-listed sturgeon incidental to the operation of Eddystone as described in the application and with the mitigation, monitoring, and reporting measures described in the ITP and conservation plan.

In the EA, we present the baseline environmental conditions for the affected resources near Eddystone along with a qualitative evaluation of potential impacts to the ESA-listed sturgeon from the operation of the power station. The information in the subsection below discusses factors considered in the analysis and the evaluation and reasons why the impacts of NMFS proposed action will not significantly affect the quality of the human environment.

Significance Evaluation:

The Council on Environmental Quality (CEQ) Regulations state that the significance of an action should be analyzed in terms of both “context” and “intensity” and lists ten criteria for intensity. The Companion Manual for NOAA Administrative Order 216-6A requires consideration of CEQ’s context and intensity criteria (40 CFR 1508.27(a) and 40 CFR 1508.27(b)) along with six additional factors for determining whether the impacts of a proposed action are significant. Each criterion is discussed with respect to NMFS’ proposed action and is considered individually as well as in combination with the others.

1. Can the proposed action reasonably be expected to cause both beneficial and adverse impacts that overall may result in a significant effect, even if the effect will be beneficial?

Response: The proposed action involves both beneficial and adverse impacts, but overall effects will be insignificant. The action involves the issuance of an ITP authorizing incidental take of shortnose and Atlantic sturgeon for the 10-year duration of the permit. This action has potential to result in adverse effects to individual animals (e.g., entrainment, impingement and vessel interactions). However, this is not likely to result in adverse effects to the species and population or further reduce the likelihood of the survival and recovery of these species in the wild since authorized take levels are very low and there will be monitoring and mitigation measures required by the ITP and the conservation plan.

2. Can the proposed action reasonably be expected to significantly affect public health or safety?

Response: NMFS’s proposed action to authorize take of ESA-listed sturgeon is not likely to have the potential for this kind of effect because NMFS will only authorize the take of the ESA-listed species associated with the operation of the power plant, which does not involve the public or expose the public directly (e.g., chemicals, diseases) or indirectly (e.g., food sources) to hazardous or toxic materials in a way that would be linked to the quality of the environment and well-being of humans.

3. Can the proposed action reasonably be expected to result in significant impacts to unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?

Response: NMFS’s proposed action is not expected to result in significant impacts to unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas because NMFS will only authorize the take of the ESA-listed species associated with the operation of Eddystone, and the location and operation of Eddystone is in an area that is not likely to change or influence characteristics of the geographic environment.

4. Are the proposed action’s effects on the quality of the human environment likely to be highly

controversial?

Response: A Federal Register notice (84 FR 33924) was published on July 16, 2019 to allow other agencies and the public the opportunity to review and comment on the Application and Conservation plan. The public comment period closed on August 15, 2019 and no comments were received. An Additional Federal Register notice (84 FR 65970) was published on December 2, 2019 to allow other agencies and the public the opportunity to review and comment on the draft EA. The comment period closed on January 2, 2020. Two comments were received on the EA. One commenter was opposed to the killing of any sturgeon. This is not consistent with the ESA, which allows for the incidental take of listed species if certain criteria are met and a permit is issued by NMFS. The other commenter seemed confused regarding the requirements of the ITP and advised the Agency to select the no action alternative in the draft EA, so that Eddystone could continue to monitor interactions with sturgeon. However, it is the issuance of the ITP that will require Eddystone to monitor interactions with sturgeon, not the no action alternative.

The action has been occurring for several years with no indications of controversy. There are no highly uncertain effects or effects that involve unique or unknown risks. The permit applicant is required to obtain any State and local permits necessary to carry out the action.

5. Are the proposed action's effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: The effects of the proposed action on the human environment would be limited to the sturgeon interactions authorized to be taken incidental to Eddystone operations, and those effects are not unique or unknown. The Endangered Species Conservation Division consulted with NMFS Endangered Species Act Interagency Cooperation Division, which determined in its Biological Opinion that issuance of the permit is not likely to jeopardize the continued existence of NMFS ESA-listed species or to result in the destruction or adverse modification of designated critical habitat. The Conservation Plan and permit requiring robust monitoring which will provide more information about shortnose and Atlantic sturgeon in the Delaware and further reduce any uncertainty.

6. Can the proposed action reasonably be expected to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

Response: The issuance of an ITP may inform the environmental review for future projects but would not establish a precedent or represent a decision in principle about future actions. NMFS's actions under ESA Section 10(a)(1)(B) are considered individually and are based on the best available scientific information, which is continuously evolving. Requests for ITPs are evaluated on their own merits relative to the criteria established in the ESA and 50 CFR 222.307 on a case-by-case basis. Therefore, issuance of an ITP to a specific entity for a given activity does not guarantee or imply that NMFS will issue future permits upon request in relation to similar activities. For these reasons, the issuance of this ITP to Exelon would not set a precedent. Should future applicants apply for permits; NMFS will conduct relevant subsequent analyses and evaluate each on a case-by-case basis.

7. Is the proposed action related to other actions that when considered together will have individually insignificant but cumulatively significant impacts?

Response: The proposed action and other individually insignificant actions do not result in cumulatively significant impacts. The proposed action will authorize the incidental take of shortnose and Atlantic sturgeon. These species face numerous natural and anthropogenic threats throughout their life histories that shape their status and affect their ability to recover. Effects of past and ongoing human and natural factors occurring in this area have contributed to the current status of these listed sturgeon. Based on the analysis in this EA and supported by ESA section 7 consultation, NMFS expects that issuance of the proposed incidental take permit would not appreciably reduce the species likelihood of survival and recovery in the wild. The incremental impact of the proposed authorization of takes of shortnose and Atlantic sturgeon incidental to the otherwise legal operation of Eddystone, when added to other past, present, and reasonably foreseeable future actions, is not expected to result in population-level effects; and, therefore, will not have cumulatively significant impacts.

8. Can the proposed action reasonably be expected to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?

Response: As noted earlier, the effects of NMFS's action, the issuance of an ITP, are limited to those occurring to the ESA-listed sturgeon that are the subject of the ITP request, and therefore, NMFS's action is not expected to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. Likewise, it is not expected to cause loss or destruction of significant scientific, cultural, or historical resources.

9. Can the proposed action reasonably be expected to have a significant impact on endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973?

Response: The issuance of the ITP is not expected to have a significant impact on the ESA-listed sturgeon or critical habitat. Based on the results of the ESA section 7 consultation (conclusion below) along with the analysis of the mitigation measures designed to avoid or minimize impacts to the ESA-listed sturgeon in the EA, NMFS expects impacts to the listed species to be minimal, with low potential take authorization of shortnose and Atlantic sturgeon. Additionally, NMFS does not expect the issuance of the ITP to destroy or adversely modify any designated critical habitat within the action area.

In June 2020, NMFS's Endangered Species Act Interagency Cooperation Division found that NMFS's action related to the operation of the Eddystone Generating station will not jeopardize the continued existence of the ESA-listed sturgeon and issued a BiOp providing conclusions specific to NMFS's action relevant to the operation of the power station.

“After reviewing the current status of the ESA-listed species, the environmental baseline within the action area, the effects of the proposed action, any effects of interrelated and interdependent actions, and cumulative effects, it is NMFS' biological opinion that the proposed action is not likely to jeopardize the continued existence of the New York Bight DPS of Atlantic sturgeon and shortnose sturgeon, nor is it likely to destroy or adversely modify designated critical habitat for the New York Bight DPS of Atlantic sturgeon.”

10. Can the proposed action reasonably be expected to threaten a violation of Federal, state, or local law or requirements imposed for environmental protection?

Response: The proposed action would provide an exemption to the ESA take prohibitions for the taking of shortnose and Atlantic sturgeon incidental to the operation of Eddystone in accordance with the Endangered Species Act. The proposed action would not result in any violation of Federal state or local laws for environmental protection, as NMFS OPR engaged in consultation and conducted analyses as necessary to ensure compliance with relevant environmental protection laws. For example, NMFS OPR Endangered Species Conservation Division initiated consultation under section 7 of the ESA with NMFS OPR Endangered Species Act Interagency Cooperation Division in October 2019 to consider the effects of issuing this ITP. This consultation concluded in February 2020 and found, as noted above, that NMFS's action to issue the ITP would not jeopardize the continued existence of the ESA-listed sturgeon that are the subject of the ITP request nor affect designated critical habitat. As discussed in the EA, NMFS's proposed action will not affect essential fish habitat (EFH) designated pursuant to the MSFCMA or critical habitat designated pursuant to the ESA or have reasonably foreseeable effects on other uses or resources near Eddystone. Subsequently, there are no other environmental laws, regulations, federal permits, or licenses applicable to NMFS for the issuance of the ITP. The ITP does not relieve Exelon of the responsibility for obtaining other permits, or complying with other Federal, State, local, or international laws or regulations, if necessary and required.

11. Can the proposed action reasonably be expected to adversely affect stocks of marine mammals as defined in the Marine Mammal Protection Act?

Response: NMFS's proposed action is not expected to have an adverse impact on any marine mammals or the habitat necessary for any marine mammal because the operation of Eddystone does not involve activities that can or would have the potential to interact with marine mammals. Additionally, The Endangered Species Act Interagency Cooperation Division issued a Not Likely to Adversely Affect (NLAA) conclusion for marine mammals that may occur in the waters along the east coast where Oil barges/vessels may navigate while en route to Eddystone from in or around New York Harbor.

12. Can the proposed action reasonably be expected to adversely affect managed fish species?

Response: The proposed action is not expected to adversely affect any managed fish population, stock or species.

13. Can the proposed action reasonably be expected to adversely affect essential fish habitat as defined under the Magnuson-Stevens Fishery Conservation and Management Act?

Response: The proposed action is not expected to cause substantial damage to essential fish habitat (EFH). The proposed action would provide an exemption to the ESA take prohibitions for the taking of shortnose and Atlantic sturgeon incidental to the otherwise lawful operation of the Eddystone facility and would not alter or affect unique areas, including any components of EFH similar to the ways that the designated critical habitat of Atlantic sturgeon will not be adversely affected.

14. Can the proposed action reasonably be expected to adversely affect vulnerable marine or coastal ecosystems, including but not limited to, deep coral ecosystems?

Response: NMFS's proposed action is not expected to adversely affect vulnerable marine or coastal ecosystems, including deep coral ecosystems, because the operation of Eddystone does

not involve activities that would have the potential to affect these ecosystems.

15. Can the proposed action reasonably be expected to adversely affect biodiversity or ecosystem functioning (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: NMFS's proposed action is not expected to have substantial impacts on biodiversity or ecosystem function within the affected action areas. The proposed action would provide an exemption to the ESA take prohibitions for taking shortnose and Atlantic sturgeon incidental to the otherwise lawful operation of Eddystone. The proposed action does not interfere with benthic productivity, predator-prey interactions, or other biodiversity or ecosystem functions. The ITP requires all take to be reported to NMFS, and Eddystone will actively monitor the level of take that occurs. Shortnose and Atlantic sturgeon mortalities may occur and are authorized by the permit, but NMFS expects that the mortality allowed by the permit would not appreciably reduce the species' likelihood of survival and recovery in the wild.

16. Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

Response: NMFS's proposed action is not expected to result in the introduction/spread of nonindigenous species because the operation of Eddystone does not involve activities that can or would have the potential to introduce nonindigenous species. The CWIS removes water from the river and then returns that water back into the system.

DETERMINATION: In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for the issuance of an Incidental Take Permit to Exelon Generating Company, LLC, it is hereby determined that the issuance of this permit will not significantly impact the quality of the human environment as described above and in the supporting Environmental Assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an environmental impact statement for this action is not necessary.

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Date