



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RTID 0648-XA785

Endangered Species; File No. 21516

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; Issuance of permit

SUMMARY: Notice is hereby given that NMFS has issued an Incidental Take Permit (ITP) (No. 21516) to Virginia Electric and Power Company, D.B.A. Dominion Virginia Power (Dominion) pursuant to the Endangered Species Act (ESA) of 1973, as amended, for the incidental take of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) associated with the otherwise lawful operation of the Dominion Chesterfield Power Station (CPS) in Chesterfield, VA. The permit is issued for a duration of 5 years.

ADDRESSES: The incidental take permit, final Environmental Assessment (EA), and other related documents are available on the NMFS Office of Protected Resources Web site at

<https://www.fisheries.noaa.gov/action/incidental-take-permit-virginia-electric-and-power-company-dba-dominion-virginia-power>.

FOR FURTHER INFORMATION CONTACT: Julie Crocker, (978) 282-8480 or email, Julie.Crocker@noaa.gov.

SUPPLEMENTARY INFORMATION: Section 9 of the ESA and Federal regulations prohibits the “taking” of a species listed as endangered or threatened. The ESA defines “take” to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. NMFS may issue permits, under limited circumstances to take listed species when the takes are incidental to, and not the purpose

of, otherwise lawful activities. Section 10(a)(1)(B) of the ESA provides for authorizing incidental take of listed species. The regulations for issuing incidental take permits for threatened and endangered species are promulgated at 50 CFR 222.307.

Background

The power-generating units at CPS utilize a once-through cooling water system that withdraws water from the James River, Virginia, through cooling water intake structures (CWIS). The openings of all the intake pipes associated with the CWISs are constantly submerged and aligned flush with and parallel to the river's axis.

In 2015, two Atlantic sturgeon larvae belonging to the Chesapeake Bay distinct population segment (DPS) of Atlantic sturgeon were found in entrainment samples collected at CPS. These were the first known takes of Atlantic sturgeon larvae at CPS despite previous entrainment sampling. Dominion anticipates that takes will occur in the future because it is required to conduct additional entrainment sampling to complete the Clean Water Act (CWA) 316(b) studies for the facility, and Dominion will continue to operate CPS for power generation, which requires withdrawing water through the CWIS. Dominion, therefore, applied for an ITP in accordance with the requirements under Section 10(a)(1)(B) of the ESA.

Dominion submitted a complete ITP application and habitat conservation plan (HCP) to us on April 10, 2017. We prepared a draft EA in accordance with the National Environmental Policy Act (NEPA), and published notice in the **Federal Register** announcing the availability of the EA, the ITP application and HCP for public comment (82 FR 37849; August 14, 2017). We received 37 comments during the public comment period. Most of the comments requested that we not issue the permit to Dominion based on the need to protect sturgeon or until Dominion had submitted a better plan for minimizing and mitigating the impacts of the taking. In addition to these, Dominion provided comments in support of its application while Southern Environmental Law

Center (SELC), on behalf of the James Riverkeeper Association, provided a report from a sturgeon expert questioning several aspects of the ITP application, including the amount of take anticipated and Atlantic sturgeon spawning success in the James River.

Dominion revised sections of their ITP application and HCP and submitted those to us on October 16, 2019, in response to the comments received as well as in response to new information regarding dispersal of Atlantic sturgeon in the James River, the risk of impingement for adult Atlantic sturgeon at CPS, and the operation of the generating units at CPS. All other parts of the ITP application and HCP that Dominion submitted to us on April 10, 2017, were incorporated by reference. We considered this application complete and published notice in the **Federal Register** of the revised application and HCP, and the availability of the draft revised EA for public comment (85 FR 36563; June 17, 2020). The comment period ended on July 17, 2020. We received comments only from Dominion and the SELC, on behalf of the James Riverkeeper Association. Dominion provided several clarifying comments for statements in the draft EA. NMFS has addressed these comments in the EA. The SELC submitted comments supporting aspects of the HPC but contend that the HPC measures do not minimize and mitigate the impacts of the taking to the maximum extent practicable. Further, they contend that NMFS failed to consider a full range of reasonable alternatives and therefore, the EA fails to satisfy the requirements of NEPA. We reviewed and considered the information provided by Dominion, the expert opinion submitted by SELC with its comments, and other available information (*e.g.*, published literature). We concluded that, based on the best information available, Dominion has demonstrated that implementing the HPC measures will minimize and mitigate the effects of the taking to the maximum extent practicable. Based on SELC's comments, NMFS also reviewed its decision to reject a third alternative that, if selected as the preferred, would have meant issuing an ITP requiring Dominion to suspend cooling water intake at CPS from August through October each year, other than

when Dominion was completing sampling for its CWA 316(b) studies. After considering the comments, we determined that SELC did not provide new information on this issue that would cause us to change our decision to reject this alternative. However, we did include more information in the final EA to explain why we rejected this alternative.

Habitat Conservation Plan

Section 10 of the ESA specifies that no permit may be issued unless an applicant submits an adequate conservation plan. The HCP prepared by Dominion describes measures to monitor, minimize, and mitigate the impacts of incidental takes of Atlantic sturgeon belonging to the Chesapeake Bay DPS. Dominion's initial ITP application requested take of Atlantic sturgeon larvae that was expected to occur as a result of entrainment at CPS, and take of adult Atlantic sturgeon that was expected to occur as a result of impingement at CPS. Dominion's HCP, therefore, addresses minimization, mitigation, and monitoring of the take of Atlantic sturgeon as a result of entrainment and impingement at CPS.

During the application process, following an Atlantic sturgeon impingement event, Dominion repaired and replaced all of the CWIS intake guards. Grid openings of the guards were reduced to prevent the smallest adult Atlantic sturgeon in the James River from entering the intake structure. In addition, the intake opening for two of the intake units was expanded to reduce water velocity. Until recently, there was limited available information for swimming speed of Atlantic sturgeon (Hilton *et al.* 2016). Dominion, therefore, used swim speed of juvenile white and juvenile green sturgeon as a proxy and concluded that adult Atlantic sturgeon would not be overcome by the CPS intake velocities and would not be impinged. New information became available recently, and it demonstrates that the average swim speed for fall spawning Atlantic sturgeon migrating past CPS to and from the spawning grounds exceeds the CPS intake velocities (Balazik *et al.* 2020). Therefore, the best available information, which includes scientific

data, supports that adult Atlantic sturgeon will not be impinged at CPS even when the fish are moving downriver after spawning. Based on this comparison, we agreed with Dominion's conclusion that impingement of adult Atlantic sturgeon is not reasonably likely to occur in the future. These changes to the intake guards are part of the minimization measures of the HCP.

The HCP also includes measures to mitigate for the anticipated take by entrainment of Atlantic sturgeon larvae at CPS and to provide information that can better inform additional measures to minimize take of the larvae. Dominion proposes to partner with Virginia Commonwealth University (VCU) which will provide Dominion access to VCU's tracking data for acoustically-tagged sturgeon that move upriver of CPS to spawn. In addition, Dominion will contract with VCU to deploy and maintain additional, new receivers downstream of CPS to better inform when spawning Atlantic sturgeon are in the vicinity of CPS. The information acquired is expected to help inform when sturgeon larvae may be present in the vicinity of CPS. The information can be used by Dominion for timing its remaining sampling to complete the required CWA 316(b) studies (*e.g.*, sampling at times when larvae are not likely to be near CPS). Knowing when spawning adults move past CPS or how long they are present in the vicinity of CPS will provide information necessary to better assess the risk of CPS operations (*e.g.*, intake flows) and to develop site-specific management actions to minimize take (*e.g.*, planning and implementing routine maintenance outages, when practicable, to coincide with peak spawning movements).

Dominion is also proposing to implement a pilot study that tests a new approach for identifying and counting Atlantic sturgeon larvae at CPS. Since this is a pilot study, the goal is to determine whether the technique can reliably detect Atlantic sturgeon larvae and if the data are sufficient to determine abundance. It is unknown whether digital holography will prove successful for detecting Atlantic sturgeon larvae or other early life

stages. However, there are currently no other successful methods for detecting these other than entrainment sampling. Therefore, the pilot study could provide new information, which would otherwise not be collected. If effective, this approach would provide information to inform minimization measures for Atlantic sturgeon larvae and will provide a new tool that has many beneficial applications for recovery of the Atlantic sturgeon DPS (*e.g.*, abundance or distribution surveys of Atlantic sturgeon early life stages).

The HPC must also address monitoring for take. Dominion's monitoring protocol is focused on entrainment of Atlantic sturgeon larvae and, therefore, differs from their protocol to complete the CWA 316(b) studies. Dominion also revised their monitoring approach from the 2017 ITP application by increasing the frequency of sampling during the targeted months of September and October, when the fall spawning period for Atlantic sturgeon in the James River typically occurs, and for the full permit duration. Dominion is no longer proposing to monitor for entrainment of Atlantic sturgeon larvae in the spring since larvae from spring spawning would only occur downriver of CPS and, therefore, would not be susceptible to entrainment at CPS.

Entrainment samples for monitoring take of Atlantic sturgeon will be sorted on site. Although free-floating Atlantic sturgeon eggs are generally considered non-viable, Dominion's entrainment monitoring methodology includes sorting for and retaining any suspected Atlantic sturgeon eggs. All Atlantic sturgeon eggs and larvae will be appropriately preserved. As explained by Dominion in their August 31, 2018, letter to us, entrainment samples for monitoring will not be collected at all of the intake units because it is unsafe and impractical given discharge or the elevation of the intake units relative to the river.

As described above, take of adult Atlantic sturgeon by impingement at the trash racks is not expected to occur because of the changes made to the intake guards that

would prevent the sturgeon from accessing the area where the trash racks are located. The HCP does, however, include monitoring of the trash racks for sturgeon. Dominion will continue to inspect trash rack debris at the water surface, and debris removed from the trash racks, for sturgeon. Dominion has sturgeon handling procedures in the event a living or dead sturgeon is found among the debris floating in the water or in the debris removed from the trash racks. Monitoring will not, however, occur at the intake guards because it is not feasible due to the turbidity of the river and the safety risk for personnel.

We conducted intra-agency section 7 consultation to ensure that issuing the permit would comply with the ESA. The Greater Atlantic Regional Fisheries Office (GARFO) Protected Resources Division issued a Biological Opinion on November 10, 2020, that considered the effects of the activities covered by this ITP as well as the effects to other ESA-listed species from the other activities reasonably expected to occur at CPS during the 5 year duration of the permit. Those other activities include the discharge of heated effluent and other pollutants resulting from CPS operations, and the barge traffic that is associated with deliveries of materials to and from CPS.

The Biological Opinion concluded that activities covered by this ITP (*i.e.*, entrainment of larval Atlantic sturgeon during CPS operations and entrainment/collection during required sampling) may adversely affect but are not likely to jeopardize the continued existence of the Chesapeake Bay DPS of Atlantic sturgeon. We also concluded that this action is not likely to adversely affect designated critical habitat for the DPS, or shortnose sturgeon, the Gulf of Maine, New York Bight, Carolina, and South Atlantic DPSs of Atlantic sturgeon, North Atlantic DPS green turtle, Kemp's ridley turtle, leatherback turtle, and Northwest Atlantic Ocean DPS of loggerhead turtle.

With respect to the other CPS activities and other ESA-listed species in the James River, the only activity that may affect other listed species is the shipment of materials to and from CPS by barge within the James River. In the Biological Opinion we concluded

that the effects of those activities on shortnose sturgeon, the four other DPSs of Atlantic sturgeon, and leatherback, Kemp's ridley, green, and loggerhead sea turtles would be insignificant or extremely unlikely to occur and that, therefore, this action was not likely to adversely affect any of these species. Dominion has not indicated any plans to conduct dredging or shoreline maintenance during the 5 year duration of the ITP. Therefore, effects to ESA listed species and critical habitat in the action area from dredging and shoreline maintenance activities are not reasonably certain to occur and do not meet the definition of "effects of the action." As a result, these activities were not considered further in the consultation. If Dominion applied for any Federal permits or authorizations for any future dredging or shoreline maintenance, ESA section 7 consultation would be necessary for any of those activities that may affect listed species or critical habitat. The full section 7 evaluation can be found in the Biological Opinion.

Permit 21516

NMFS authorizes the following lethal take for the Chesapeake Bay DPS of Atlantic sturgeon.

Entrainment: up to 54,745 larvae, total, for the 5-year duration of the permit with an anticipated average annual take of 10,949 per year during normal operation of CPS, and 1 larvae over the 5-year duration of the permit during sampling to complete CWA section 316(b) sampling.

Impingement: There is no authorized or anticipated incidental take by impingement based on the already implemented minimization measures.

The first 3 years of monitoring data collected under the permit will be analyzed to verify the requested total annual incidental take. As data are gathered and analyzed through monitoring, NMFS may amend the permit to reflect any changes in the take estimate, if appropriate.

The permit requires Dominion to prepare a report, due to NMFS within 90 days of issuance of the ITP, which details how observed take of Atlantic sturgeon will be extrapolated to generate an accurate and reliable estimate of total annual take at the facility. Dominion must also submit reports of any observed take of Atlantic sturgeon to NMFS within seven days, and must prepare an annual report detailing all observed takes of Atlantic sturgeon at CPS. NMFS review of the annual report provides an opportunity to monitor the ongoing amount of take at CPS and detect any trends that may indicate a potential exceedance of the anticipated take before such an event occurs.

National Environmental Policy Act

Issuing an ESA section 10(a)(1)(B) permit constitutes a Federal action requiring NMFS to comply with NEPA (42 U.S.C. 4321 *et seq.*) as implemented by 40 CFR parts 1500–1508 and NOAA Administrative Order 216–6A, Compliance with the NEPA (2016). NMFS prepared an EA to consider a range of reasonable alternatives and fully evaluate the direct, indirect, and cumulative impacts likely to result from the authorization of this permit. NMFS found that issuing the ITP would have no significant impacts on the quality of the environment.

Authority: This notice is provided pursuant to section 10(c) of the ESA (16 U.S.C. 1531 *et seq.*) and NEPA regulations (40 CFR 1506.6).

Dated: January 6, 2021.

Angela Somma,
Chief, Endangered Species Division,
Office of Protected Resources,
National Marine Fisheries Service.

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