Incidental Take Permit (File No. 29773)

Supplemental Information Report

to Address Additional Take

[DATE]

United States Department of Commerce

National Oceanic and Atmospheric Administration

National Marine Fisheries Service

Greater Atlantic Region Fisheries Office

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1.0 Background

Virginia Electric and Power Company doing business as Dominion Virginia Power (Dominion) has requested renewal of their Endangered Species Act (ESA) permit, currently Permit no. 21516-02, which authorizes the incidental take of the Chesapeake Bay distinct population segment (DPS) of Atlantic sturgeon as a result of the otherwise lawful operation of the Chesterfield Power Station (CPS). This Supplemental Information Report (SIR) considers Dominion's request to renew the permit for the incidental take of Atlantic sturgeon eggs and larvae at CPS for the next 10 years.

On December 10, 2025, Dominion submitted a complete application for renewal of Permit no. 21516-02 to allow for the incidental take of Atlantic sturgeon eggs and larvae for the next 10 years. Dominion anticipates take of up to 109,490 sturgeon larvae and up to 183,630 non-viable sturgeon eggs over the duration of the requested 10-year permit. Dominion's renewal application included a Habitat Conservation Plan (Conservation Plan) that describes what Dominion will do to minimize and mitigate, to the maximum extent practicable, the impacts of the incidental take to the Chesapeake Bay DPS of Atlantic sturgeon.

2.0 Purpose of this Supplemental Information Report

We propose to renew Dominion's incidental take permit and issue the new permit for a period of 10 years as requested. The purpose of this review is to determine and document whether our decision to issue a new incidental take permit for the continuing activity requires us to supplement the 2020 Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) that we completed for issuance of the original permit, Permit no. 21516 (NMFS 2020).

In making a determination on the need for additional analysis under the National Environmental Policy Act (NEPA), we have considered and have been guided by applicable case law and NOAA's Policy and Procedures for Compliance with NEPA (NOAA Administrative Order 216-6A and its Companion Manual, June 30, 2025), which state that the decision maker must prepare a supplement to an EA if: (i) there are substantial changes in the proposed action that are relevant to environmental concerns; or, (ii) there are significant new circumstances or there is new information relevant to environmental issues bearing on the proposed action or its impacts. We have determined that any changes to the proposed action or new circumstances or information relevant to environmental concerns are not significant and therefore do not require a supplement.

For this SIR, we compared our proposed action to the action analyzed in the 2020 EA. We next considered whether there are any significant new circumstances or information that are relevant to environmental concerns and have a bearing on the proposed action or its impacts. We consulted, among other sources, our files and other information available to NMFS for our consideration of new circumstances and information to determine whether a Supplemental EA should be prepared.

3.0 New Proposed Action

Our proposed action is based on information regarding the incidental take of Atlantic sturgeon eggs and larvae at CPS, and operational changes at CPS since issuance of Permit no. 21516. Specifically, we propose to:

- authorize the incidental take of up to 109,490 larvae belonging to the Chesapeake Bay DPS over the duration of the requested 10-year incidental take permit, based on an expected entrainment rate of 0.000132423 (95% Confidence Interval 0.000022013 - 0.000408657) larvae per cubic meter of water multiplied by the anticipated water volume to be withdrawn over the 6-week Atlantic sturgeon spawning period in September and October;
- authorize the incidental take of up to 183,630 non-viable eggs belonging to the Chesapeake Bay DPS over the duration of the requested 10-year incidental take permit, based on an expected entrainment rate of 0.0002220850 (95% Confidence Interval 0.00005522990 - 0.0005758866) Atlantic sturgeon eggs per cubic meter of water multiplied by the anticipated water volume to be withdrawn over the 6-week Atlantic sturgeon spawning period in September and October;
- allow entrainment sampling for monitoring to occur at the furthest upriver cooling water intake structure that is operational at CPS at the time monitoring occurs;
- allow entrainment sampling for monitoring to be paused on the rare occasion that all CPS river circulating pumps are not operating;
- require visual inspections of the cooling water intake structure trash racks only from September through October;
- require Dominion to do an annual dive inspection of the intake guards at potentially operating CPS cooling water intake structures to confirm that the guards are intact and capable of excluding any adult Atlantic sturgeon as designed and, as needed based on the dive inspection, make repairs to the guards by September 1;
- require Dominion to clean the trash racks only as operationally necessary or, in the event a unit specific intake guard is found to be in jeopardy of not functioning as designed, require trash raking at the specific intake unit twice per day (once per 12-hour shift during daylight hours) during the fall sturgeon spawning window as identified by the real-time telemetry system;
- require Dominion to carry out the Sturgeon Movement Research Study as described in their Conservation Plan, including using the data collected to minimize the entrainment of sturgeon eggs and larvae at CPS;
- require Dominion to carry out the Genetic Relationship Research Study as described in their Conservation Plan, including preservation of the genetic material and the genetic data to support monitoring for take and to inform management of the Chesapeake Bay DPS of Atlantic sturgeon;
- require Dominion to carry out the Digital Holography Entrainment Pilot Study as described in their Conservation Plan to inform alternative, non-lethal, methods that could improve data collection and estimation of the number of Atlantic sturgeon eggs and larvae that are entrained annually at CPS; and,
- require Dominion to conduct entrainment monitoring from September 1 through October 31 using the methods described in their Conservation Plan.

4.0 Background of Original Action

4.1 Original Issuance of Permit No. 21516

We issued Permit no. 21516 on December 10, 2020, based on Dominion's application and Conservation Plan that was submitted to us after two larval Atlantic sturgeon were entrained and one adult Atlantic sturgeon was impinged at CPS in 2015. The entrainment and impingement constituted "taking" of the Chesapeake Bay DPS of Atlantic sturgeon which is listed under the ESA as endangered.

Dominion submitted a complete application to us in 2017 for issuance of a permit to authorize the incidental take of the Chesapeake Bay DPS of Atlantic sturgeon in the course of the otherwise lawful operation of CPS. We prepared a draft EA and published notice in the **Federal Register** announcing the availability of our draft EA and Dominion's permit application for public comment (82 FR 37849; August 14, 2017). Dominion subsequently revised and resubmitted their application in response to new information, public comment, and questions stemming from our further review. There were also operational changes at CPS since their original submission. Given the extent of the changes, we conducted a new NEPA analysis and announced the availability of a new, draft EA in the **Federal Register** for review and comment (85 FR 36563; June 17, 2020). The Chesapeake Bay DPS of Atlantic sturgeon was the only resource identified as being potentially affected by issuance of the permit, and their larvae were the only life stage anticipated to be taken.

Permit no. 21516 authorized the take of up to 54,745 Atlantic sturgeon larvae over the 5-year duration of the permit by entrainment from operation of CPS, plus one take of an Atlantic sturgeon larva because of entrainment sampling that was needed to complete Dominion's Clean Water Act 316(b) studies for CPS. The permit did not authorize take of adult Atlantic sturgeon because Dominion implemented new measures following lethal impingement of four adult sturgeons at CPS while their application was in process. As a result, we agreed with Dominion's assessment that impingement of adults was not anticipated to occur in the future. Permit no. 21516 did not include take authorization for sturgeon eggs, juveniles, or subadults because Dominion believed, and we agreed, that none of those life stages would be present in the vicinity of CPS where take could occur.

Permit no. 21516 required Dominion to carry out the monitoring, mitigation, and minimization measures that they described in their Conservation Plan which were:

- monitor entrainment of fall-spawned Atlantic sturgeon larvae by collecting four 24-hour diel entrainment samples (one every six hours), three times per week during September to October for a total of 96 samples per year;
- monitor for the incidental take of Atlantic sturgeon eggs and adults even though take of these life stages was not expected to occur;
- mitigate the impacts of taking sturgeon larvae by implementing two studies, "Sturgeon Movement Research" and "Digital Holography;"
- use the results from the studies to plan and implement routine maintenance outages, when practicable, to coincide with peak larval abundance periods - thereby minimizing the incidental take of Atlantic sturgeon larvae by entrainment. In addition, the studies

would provide new information which would otherwise not be collected and would be expected to contribute to the information that is considered the best available scientific information for the Chesapeake Bay DPS.

In the determinations supporting permit issuance, we concluded that the best available scientific information supported a determination that the take of up to 54,746 Atlantic sturgeon larvae over the 5-year duration of the permit would have only a minor impact on the survival and recovery of the Chesapeake Bay DPS because it is just a fraction of the eggs produced by even a single female in a single spawning year of a single spawning population belonging to the Chesapeake Bay DPS. We determined that Dominion's minimization measures that are expected to reduce the taking of adults at CPS to zero would further mitigate the impacts of larval entrainment because preventing the impingement of even one adult female over the 5-year duration of the permit means that the female has an opportunity to spawn and produce more larvae. We, therefore, identified issuance of an incidental take permit to Dominion for five years as the preferred alternative in the 2020 EA because issuing the permit would benefit the Chesapeake Bay DPS by providing opportunity for monitoring specific to Atlantic sturgeon early life stages and would require Dominion to implement the mitigation measures that would otherwise not occur. We also identified that the monitoring and mitigation might have a secondary effect of providing information that will contribute to knowledge of Atlantic sturgeon habitat use in the James River. We expected that issuing the permit would result in positive impacts to the biological, social, and economic environment in the long-term, would have a positive impact on science and cultural resources, and would have no effect on Essential Fish Habitat for federally managed species (Table 1).

Table 1: Effects Considered in the EA for issuance of Permit no. 21516 (NMFS 2020)

Effects of Permit Issuance On:	
Chesapeake Bay DPS	Issuing the permit will benefit the Chesapeake Bay DPS by providing opportunity for monitoring specific to Atlantic sturgeon early life stages and would require Dominion to implement the mitigation measures that would otherwise not occur. The monitoring and mitigation might also have a secondary effect of providing information that will contribute to knowledge of Atlantic sturgeon habitat use in the James River.
Physical and Biological Environment	A moderate positive impact by virtue of positively impacting survival of adult Atlantic sturgeon and their offspring which help to transfer nutrients between the ocean and the James River estuary. If the proposed minimization and mitigation measures for Atlantic sturgeon incidentally reduce effects to another native species, then issuance of the incidental take permit may have a positive impact on that other native species as well.

Effects of Permit Issuance On:	
Essential Fish Habitat for federally managed species	No impact because none is designated in the vicinity of CPS.
Social and Economic Environment	A slight positive impact by virtue of the positive impacts to Atlantic sturgeon survival and reproduction in the James River (e.g., an increased abundance of Atlantic sturgeon would contribute to ecotourism focused on Atlantic sturgeon in the river, and could contribute to the economy of cities, such as Richmond, where people view sturgeon in the river. Other fish species, such as those targeted for recreation and commercial purposes, could also benefit from the positive impacts to the physical and biological environment with concomitant economic benefits to the human environment.
Historic Places, Scientific, Cultural, and Historical Resources	A positive impact on scientific resources (e.g., Virginia Commonwealth University with whom Dominion is partnering to further knowledge of Atlantic sturgeon), a slight positive impact on cultural resources because Atlantic sturgeon has a valued place in the pre- and post-colonial history of the James River and measures that benefit and support the recovery of Atlantic sturgeon spur public interest for further action to benefit the DPS and the environment.

4.2 Dominion's Request for Renewal of the ESA Incidental Take Permit

Dominion's CPS is still necessary for power generation. Some of the power generating units have been retired since Permit no. 21516 was issued in December 2020. However, take of Atlantic sturgeon larvae and eggs is still anticipated to occur at the remaining power generating units.

Dominion is requesting that the permit, if renewed, be valid for 10 years. In 2017, Dominion initially requested a ten-year incidental take permit but subsequently revised their application by requesting a five-year permit because the shorter timeframe afforded opportunity to gather information from the proposed mitigation studies and to more promptly implement changes based on new information. In addition, as part of their Virginia Pollution Discharge Elimination System (VPDES) permit renewal, Dominion would have to comply with a Best Technology Available standard for impingement and entrainment mortality. Therefore, Dominion considered that a permit issued for five years instead of a longer permit duration helped to prevent the preclusion of operational changes at CPS that may be considered or necessary for Dominion to meet the Best Technology Available standard of the future VPDES permit.

Dominion's renewal of its VPDES permit is still pending but the additional five years of data collected by Dominion since issuance of Permit no. 21516 provides greater certainty for estimating take of sturgeon eggs and larvae at CPS. Therefore, Dominion is requesting that the new incidental take permit be valid for 10 years. Dominion has included possible future changes to the CWA 316(b) rule or as a result of a new VPDES permit as a "Changed Circumstance." Specifically, per Dominion's renewal application, "Should the CWA 316(b) rule or VPDES permit mandate a revision to the CPS cooling water flow or intake structure design, Dominion would contact NMFS to discuss the change in operating condition mandated by the rule. If NMFS and Dominion deem it necessary, Dominion would prepare a BE" (i.e., Biological Evaluation) "to determine if there would be additional impacts as a result of the new operating condition. This would be submitted to NMFS for their review and concurrence or request for an amendment to the Conservation Plan if deemed necessary."

5.0 Changes from the Original Action

Dominion is seeking to retain the changes made to the original action, Permit no. 21516, which were reflected in Permit no. 21516-01 for modifications to operational changes at CPS (88 FR 82324, November 24, 2023) and reflected in Permit no. 21516-02 for authorization for incidental take of non-viable sturgeon eggs (90 FR 51663, November 18, 2025). Dominion is also seeking to retain the mitigation measures of the original action but with changes to further advance the objectives. Therefore, the new action would:

- allow entrainment sampling for monitoring to occur at the furthest upriver cooling water intake structure that is operational at CPS at the time monitoring occurs;
- allow entrainment sampling for monitoring to be paused on the rare occasion that all CPS river circulating pumps are not operating if NMFS is notified within 24 hours of Dominion shutting down all water intake at the circulating water pumps, and provided the notification includes information describing the reason(s) for the shutdown and the expected duration of the shutdown;
- require visual inspections of the cooling water intake structure trash racks (and the immediate area upstream) from September 1 through October 31;
- require Dominion to annually inspect (i.e., by divers) the intake guards at CPS cooling water intake structures no earlier than March 1 and no later than August 15 to confirm that the guards are intact and capable of excluding any adult Atlantic sturgeon as designed, and make repairs to the guards, as needed, prior to September 1;
- require Dominion to clean the trash racks via a mechanical trash rake only as operationally necessary or, in the event a specific intake guard is found to be in jeopardy of not functioning as designed, the trash racks associated with that intact guard must be cleaned via a mechanical trash rake twice per day (once per 12-hour shift during daylight hours) during the fall sturgeon spawning window of September 1 through October 31;
- require that, prior to September 1, trash raking must occur at a specific intake guard if it is found to be at risk of not functioning as designed and adult Atlantic sturgeon are present in the vicinity of CPS as indicated by the real-time telemetry system;
- use the same methods for estimating the annual and total anticipated take of Atlantic sturgeon larvae and of non-viable Atlantic sturgeon eggs;

- continue the genetic relationship research to further characterize the genetics at defined microsatellite loci of the James River fall-spawning population and to monitor that take is only of Atlantic sturgeon belonging to the Chesapeake Bay DPS;
- continue the sturgeon tracking study, "Sturgeon Movement Research", with emphasis on tracking tagged adults near CPS to better inform when spawning is likely occurring and where it is likely occurring near CPS; and,
- continue the Autoholo "Digital Holography" study to further test its feasibility for sturgeon early life stage detection in turbid conditions at a CPS cooling water intake structure.

5.1 Information regarding Changes to the Original Action

We described in the 2020 EA for issuance of Permit no. 21516 that Virginia's General Assembly passed the Virginia Clean Economy Act in March 2020 that requires the state's biggest utilities (e.g., Dominion) to deliver electricity from 100 percent renewable sources by 2045. Dominion stopped generating power at Units 5 and 6 in 2023. Since then, most water withdrawn for non-contact cooling purposes is through the cooling water intake structures at Units 7 and 8 (further downriver). At the time of the original action, Dominion used the Unit 6 cooling water intake structure as the primary location for entrainment sampling monitoring because Unit 6's river circulating pumps had a design intake flow that withdrew the highest proportion of the total water volume used at CPS, had the single largest flow rate, contained pumps that had been operated the most, and was the farthest upstream of CPSs operating units. Unit 4, a retired but still sometimes operational unit at that time, was the backup. Subsequent to the decision to retire Unit 6 from power generation, Dominion addressed safety concerns such that entrainment sampling for monitoring could be conducted at Units 7 and 8. To address these changed circumstances and to ensure that entrainment monitoring can occur during September through October, we modified Permit no. 21516 to include that entrainment sampling for monitoring the take of sturgeon eggs and larvae should be conducted at the furthest upriver CPS unit that is operational at that time (88 FR 82324, November 24, 2023).

In response to a question from Dominion after we issued Permit no. 21516, we clarified that entrainment sampling for monitoring is required if any of the water pumps at CPS are operating during September and October, regardless of whether electricity is being generated. In the event that none of the CPS circulating water pumps are operating during the 8-week entrainment sampling period, then entrainment sampling for monitoring is not required since the purpose of sampling is to monitor for take of Atlantic sturgeon eggs and larvae when water is being withdrawn from the James River to operate CPS (Letter from Jennifer Anderson for NMFS to Robert Sauer for Dominion; May 10, 2021). We consider this situation unlikely to occur based on the information provided by Dominion and there is no new information that changes the determination. If it occurs, Dominion must notify us within 24 hours of shutting down all water intake at the circulating water pumps and that notification must include information describing the reason(s) for the shutdown and the expected duration of the shutdown. Entrainment sampling can be paused only during the specific timeframe when none of the pumps are in operation.

Permit no. 21516 required Dominion to visually inspect CPSs cooling water intake structure trash racks (and the immediate area upstream) during daylight hours at least once per 12-hour

shift. However, information from Dominion's mitigation study, "Sturgeon Research Movement," subsequently confirmed that sturgeon are not in the vicinity of CPS year-round and informed the relatively short period of time when sturgeon are in the vicinity of CPS. We, therefore, revised Permit no. 21516 per Dominion's request to require that visual inspections of the trash racks occur in September through October, only, when sturgeon are moving past CPS to and from the upriver spawning grounds. Dominion's request for a new permit includes keeping this change.

Permit no. 21516 also required Dominion to clean each trash rack via a mechanical trash rake at least once per 12-hour shift during the fall sturgeon spawning window as a way of monitoring whether the intake guards were still in place and otherwise functioning to prevent sturgeon from passing through the opening of a cooling water intake structure. The permit condition was subsequently replaced with the condition that the intake guards must be inspected by a diver at potentially operating CPS cooling water intake structures no earlier than March 1 and no later than August 15 to confirm that the guards are intact and capable of excluding any adult Atlantic sturgeon as designed. Repairs must be made, as needed, prior to September 1. Dominion would clean the trash racks only as operationally necessary or if an intake guard is in jeopardy of not functioning as designed. Dominion's request for a new permit includes retaining the conditions for the cleaning of the trash racks and the intake guard dive inspections.

The original permit was issued without any authorization for incidental take of Atlantic sturgeon eggs because such take was not anticipated to occur. However, during the required monitoring for Permit no. 21516, three Atlantic sturgeon eggs were found in entrainment samples collected at CPS in September 2021, 42 sturgeon eggs were collected in September 2022, and 11 sturgeon eggs were collected in two separate entrainment sampling events in September 2023. Dominion revised its methodology for estimating future take of Atlantic sturgeon eggs at CPS based on this new information, resulting in the request for a permit modification to allow for the take of up to 18,363 (range 4,567-47,617) Atlantic sturgeon eggs per year. The modification was approved and the permit reissued as Permit no. 21516-02. Dominion's request for a new permit includes an anticipated annual take of up to 18,363 sturgeon eggs per year based on the previous incidental take of sturgeon eggs at CPS. There is no new information that changes the number of sturgeon eggs that are likely to be taken at CPS. We do not know what circumstances increase the chances that free-floating eggs (whether fertilized or unfertilized) will drift nearer to the CPS cooling water intakes such that they are vulnerable to being taken, and we have not identified any factors that would result in Dominion's estimate of egg take being under- or over-estimated. Atlantic sturgeon eggs that are entrained at CPS are non-viable eggs because they are either unfertilized eggs or because they were fertilized eggs that dislodged from the substrate (i.e., free floating).

The information from Dominion's study, "Sturgeon Movement Research," conducted in cooperation with Virginia Commonwealth University per the mitigation component of Permit no. 21516 supports that Atlantic sturgeon spawn kilometers upriver of CPS and suggests that there is also a spawning area within a few kilometers downriver of CPS (Dominion 2022). The new information from the study further supports that water temperature is a trigger for spawning and informs when female sturgeon move to the spawning areas upriver of CPS. Dominion has used this information to minimize the likelihood of incidentally entraining sturgeon eggs and larvae by scheduling maintenance outages when sturgeon early life stages may be present near CPS

based on the tracking of adult sturgeon and the inferred timing of when they spawned. This new information also helps managers identify where and when threats to adults occur so that action can be taken to address the threat while minimizing the impact of the action on other resources. Dominion's request for a new permit includes continuing this study to further identify where and when Atlantic sturgeon spawn near CPS.

The information from Dominion's study, "Digital Holography," conducted per the mitigation component of Permit no. 21516 shows that it may be feasible to use this non-lethal technique to monitor for the presence of early Atlantic sturgeon life stages (i.e., eggs and larvae) and to enumerate the number present. The work completed for the original action demonstrated that this is a viable technique for identifying Atlantic sturgeon larvae and discerning those from other similarly sized larvae without causing harm to the fish (Sanborn et al. 2023). Dominion's request for a new permit includes further study to determine the feasibility of using digital holography in lieu of traditional entrainment monitoring, including site-specific evaluations at CPS, refining egg detection methods, mitigating biofouling, refining turbidity tolerance, and integrating continuous monitoring capabilities.

5.3 New Information for the Chesapeake Bay DPS and Other Valued Ecosystem Components

We listed the Chesapeake Bay DPS of Atlantic sturgeon as endangered in 2012 (77 FR 5880; February 6, 2012). In 2022, we completed a 5-year review of the Chesapeake Bay DPS in which we described new information available since the listing, including information that further supports our understanding of when and where spawning occurs, the spawning periodicity (i.e., the number of years between spawning runs), and the number of spawning adults (NMFS 2022). There has been limited new information for the Chesapeake Bay DPS since the 5-year review (Kahn et al. 2026; Kahn et al. 2023a; Kahn et al. 2023b) and none specifically for the fall spawning population in the James River, Virginia. None of the information that has become available since completion of the EA for the original action changes the overall understanding of the Chesapeake Bay DPS considered in the EA or change any anticipated impacts. There has also been no other new information regarding other VECs considered in the EA that would change the anticipated impacts to resources other than Atlantic sturgeon.

6.0 NEPA Compliance

While acknowledging that there are adverse effects to the Chesapeake Bay DPS that result from the continued operation of CPS, we concluded in the 2020 EA that issuing the permit would benefit the Chesapeake Bay DPS because it would require monitoring specific to the Atlantic sturgeon early life stages and would require Dominion to implement the mitigation measures that, absent the issuance of the Incidental Take Permit, would otherwise not occur. The monitoring and mitigation might also have a secondary effect of providing information that will contribute to knowledge of Atlantic sturgeon habitat use in the James River. We also expected that the positive impacts to Atlantic sturgeon survival and reproduction in the James River from issuing the permit would result in positive impacts to the biological, social, and economic environment in the long-term, and will have a positive impact on science and cultural resources.

We concluded that issuing the permit would have no effect on Essential Fish Habitat for federally managed species because none is designated in the vicinity of CPS (NMFS 2020).

Issuing a new permit to Dominion to replace Permit no. 21516 does not change our previous determinations, as summarized in Table 1. There is no new information that would suggest operations at CPS are causing impacts that were not considered in the EA for the original action. The new permit would have the same permit conditions and authorizations as Permit no. 21516 as modified in 2023 and 2025 (see Section 5.0). The primary difference is that the new permit would have a duration of 10 years and would include the possibility of revisiting the permit and the Conservation Plan in the event of changed circumstances such as might occur because of issuance of a new/revised VPDES permit for CPS. The extension of the permit duration from 5 to 10 years does not change the intensity or context of impacts because annual take rates and operational conditions remain consistent with those previously analyzed and does not result in impacts that differ in type, magnitude, or intensity from those previously analyzed.

As described above, some of the CPS intake units have been retired from power generation, including intake Unit 6. We previously modified the permit to include a requirement that entrainment sampling for monitoring be conducted at the furthest upriver CPS unit that is operational at that time. The previous modification would continue to be implemented through the new permit, and actual sampling procedures would continue to remain the same, following methods previously considered.

We previously clarified for Dominion that entrainment sampling for monitoring is not required if none of CPS's circulating water pumps are operating during the 8-week entrainment sampling period from September through October since the purpose of sampling is to monitor for take of Atlantic sturgeon when water is being withdrawn from the James River to operate CPS. The new permit would incorporate this clarification.

Permit no. 21516 originally required Dominion to visually inspect CPS's trash racks (and the immediate area upstream) during daylight hours at least once per 12-hour shift. However, based on the best available information, Atlantic sturgeon are not present in the vicinity of CPS year-round. The new permit modifies this condition to require visual inspections in September through October, only, to coincide with the timeframe when sturgeon are moving past CPS to and from the upriver spawning grounds. This simply eliminates unnecessary additional inspections when sturgeon are not present and would therefore be expected to result in similar benefits and effects as originally analyzed.

The intake guards are the first part of CPS's cooling water intake structures that would be encountered by adult Atlantic sturgeon. The guards were specifically designed to prevent adult Atlantic sturgeon from entering the intake structures where they could be impinged. For the original action, Permit no. 21516, trash raking during the sturgeon spawning season was a proxy; that is, it was a way to monitor whether the intake guards were in place and not damaged such that an adult sturgeon could pass through the intake opening. For example, evidence of large debris or a greater quantity of debris observed during trash raking would have been indicative of possible damage to or loss of an intake guard. Modification of the permit conditions for Permit no. 21516-01, included a requirement for Dominion to conduct an annual inspection of the intake

guards. As long as the inspection, reasonably timed to occur as close as practicable to the sturgeon spawning season, demonstrates that each intake guard is in place and is not damaged, then adult sturgeon should not be able to pass through the intake opening and raking the trash racks is unnecessary. Dominion conducted yearly dive inspections after issuance of Permit no 21516-01 and no adult Atlantic sturgeon have been impinged at CPS. Dominion's request for a new permit with a requirement to require a yearly dive inspection of each intake guard and requiring trash raking only as operationally necessary would provide the same or better level of impingement monitoring at CPS than what was originally required by Permit no. 21516.

Permit no. 21516 included a permit condition, condition IV.C.4.g., that incorrectly referred to a 6-week period for entrainment sampling monitoring. Elsewhere, the permit correctly referred to the 8-week period from September through October. We corrected permit condition IV.C.4.g. when we issued Permit no. 21516-01. Dominion's request for a new permit to include this same correction is no more than a minor change from the original action and does not change the effects of the action because, for the 2020 EA, we considered the entrainment sampling period for monitoring to be the 8-week period from September through October.

None of these changes are anticipated to change the previous impact conclusions in the 2020 EA (as summarized in Table 1) for any resources. As discussed above, new information about sturgeon movement and entrainment of eggs is also not expected to change the EA's impact conclusions. The modifications will simply help ensure that the permit's original goals for preventative measures and monitoring, as well as their associated impacts to resources, continue to be realized.

The new information on the take of Atlantic sturgeon eggs at CPS also does not change our determinations for effects to the physical and biological environment, social and economic environment, historic places, scientific, cultural, and historical resources, and Essential Fish Habitat because CPS is not the cause of the eggs becoming dislodged and drifting downriver, and the eggs will not survive to develop into sturgeon even if entrainment or capture does not occur at CPS because the free-floating eggs are not viable.

7.0 Public Participation

We provided opportunities for public review of Dominion's permit application and Conservation Plan, as well as the 2020 EA through publication of notices in the **Federal Register** (82 FR 37849; August 14, 2017, and 85 FR 36563; June 17, 2020). We reviewed and considered the information provided by commenters in the final EA, and responses to those comments are addressed in the 2020 document.

We provided an opportunity for public review of the first of Dominion's requested permit modifications and our draft SIR for that modification through publication of a notice in the **Federal Register** (87 FR 47190; August 2, 2022). We received joint comment from the Southern Environmental Law Center (SELC) and the James River Association (JRA) who agreed with most of the proposed permit changes but suggested additional measures to ensure that the scheduled dive inspection of the intake guards was not conducted too far in advance of the fall

spawning season and disagreed with any changes in the frequency of trash raking. The final modifications incorporated changes based on these public comments.

The SELC and JRA disagreed with our preliminary determination that there was no need to supplement the 2020 EA and FONSI. They stated that the capture of three eggs at CPS in 2021 following a high flow event supported their previous statement that the CPS thermal discharge is likely preventing or reducing the probability of successful Atlantic sturgeon migration and spawning. We considered the effects of CPS's thermal discharge in the 2020 EA. The capture of three sturgeon eggs in 2021 during a high river flow event did not change our conclusion that the CPS thermal discharge does not create a thermal barrier that prevents Atlantic sturgeon from moving upriver to spawn. The capture of 42 sturgeon eggs in 2022 and the capture of 11 sturgeon eggs in 2023 under normal river conditions provides further support that the thermal plume at CPS is not a barrier to migrating adults or that it is preventing spawning.

We provided an opportunity for public review of the second of Dominion's permit modifications and our draft SIR for that modification through publication of a notice in the **Federal Register** (89 FR 104105; December 20, 2024). The SELC and the JRA jointly commented that we, NMFS, have not met the NEPA requirements for our proposed issuance of the permit modification because new information contradicts some of the assumptions in the 2020 EA. They insisted that we should prepare a supplement to the EA to address the significance of the new information. However, we concluded that the SELC and JRA comments did not provide any information that we had not already considered. We determined that supplementing the 2020 EA and FONSI was not necessary because the permit modification and its impacts are not relevant to environmental concerns and do not bear on the action or its impacts (NMFS 2024). The new proposed permit would generally extend the same requirements and conditions that the public had an opportunity to review during those previous modifications.

8.0 Conclusion

In accordance with NOAA's NEPA procedures, after considering the proposed action in Section 3.0 and new information in Section 5.3, NMFS has preliminarily determined that a supplement to the EA prepared for Permit no. 21516 to Dominion for incidental take of Atlantic Sturgeon from the Chesapeake Bay DPS in the James River from the operation and maintenance of Chesterfield Power Station, is not needed. Further supplementation is not needed because: 1) the new proposed specifications do not amount to a substantial change relevant to environmental concerns; and 2) there are no new circumstances or information about the significance of the adverse effects that [have] bearing on the proposed action or its effects. The Finding of No Significant Impact (FONSI) signed on December 10, 2020, therefore remains valid to support the proposed action.

Preparers:

This document was prepared by the Greater Atlantic Regional Fisheries Office, Protected Resources Division (GARFO PRD) in Gloucester, Massachusetts who consulted with GARFO's NEPA program in preparing this document.

9.0 References

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