MEETING NOTES
Stevens Creek Hydroelectric Project (FERC No. 2535)

Dominion Energy South Carolina, Inc.
Fish Passage Technical Working Committee

March 20, 2025

Final JAG 5/13/25

MEETING ATTENDEES[1]:

Ray Ammarell – Dominion Energy
Will Barnes – Dominion Energy
Audrey Bauhan – Dominion Energy
Amy Bresnahan – Dominion Energy
Caleb Gaston – Dominion Energy
Aaron Gray – GAWRD
Jenn Güt – Kleinschmidt
Fritz Hoogakker – Dominion Energy
Alison Jakupca – Kleinschmidt
Kevin Mack – NMFS
Elizabeth Miller – SCDNR
Bill Post – SCDNR
Will Pruitt – Kleinschmidt
Andrew Rollins – Dominion Energy
Hunter Roop – GAWRD
Paul Vidonic – Dominion Energy
Jesse Waldrip – Kleinschmidt
Keith Whalen – USFS

Not in Attendance: USFWS

These notes are a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.

MEETING PURPOSE: This meeting was held on-site with the primary purpose of viewing the installed experimental eel ladder and reviewing the Habitat Suitability Study Plan to advance efforts among the Stevens Creek Hydroelectric Project (Project) Fish Passage Technical Working Committee (FPTWC, group, or committee).

Alison Jakupca, Kleinschmidt, began the meeting with a welcome and led introduction of FPTWC members. Caleb Gaston, Dominion Energy, provided relevant information about the meeting location and led a safety moment.

[1] Abbreviations/Acronyms: GAWRD = Georgia Department of Natural Resources, Wildlife Resources Division; Kleinschmidt = Kleinschmidt Associates; NMFS = National Oceanic and Atmospheric Administration, National Marine Fisheries Service; SCDNR = South Carolina Department of Natural Resources; USFWS = United States Fish and Wildlife Service; USFS = United States Forest Service

American Eel Passage

Caleb discussed the work that had been conducted thus far regarding the Spring 2025 Eel Study. The temporary eel ramp was installed at the Project below the powerhouse on the Georgia shoreline on February 27, 2025. No eels had been collected via the ramp to date. Dominion Energy biologists have noticed crayfish occasionally clogging up the intake, and they intend to make improvements to the intake in an attempt to eliminate or reduce entrainment. The eel ramp is currently checked three times per week. HOBO TidbiT water temperature data loggers were installed in both the river and in the ramp live well. The eel pots were fished once: planted on March 1 and checked on March 2, 2025. Darters were collected in the pots but no eels. Blueback Herring was used as bait. Through electrofishing efforts as part of the Eel Study, 45 eels had been collected below the Project dam ranging from 123 to 610 millimeters (mm).

Caleb stated that Dominion Energy biologists are currently manually tagging all eels collected but asked the committee if they believed there was an eel too small or large for tagging. Paul, Dominion Energy, noted that the cut-off for not applying a tag to an eel at the Roanoke Rapids Project is 140 mm.

Caleb inquired of the FPTWC if they believed tagging needed to be done in such a way as to identify the location of the captured eels (i.e., should eels be tagged according to the site where they were captured). Caleb's preference is to electro fish the entire planned study area and then tag and release eels at one time and location rather than tag and release eels by site. This approach would be logistically better for the Dominion Energy biology team. This methodology was agreeable to the attending committee members. In summary, the number of eels captured per site would be recorded. The eels would be grouped and tagged simultaneously[2] and released in one location at the head of Stallings Island. Eels captured above the dam via pots will be marked using a fin clip.

Will Barnes, Dominion Energy, asked the committee if a limit or cap on the number of eels tagged should be considered; the biology team could tag up to a certain number and conduct counts and measurements for the remaining individuals. Bill Post, SCDNR, responded that capping the number of eels tagged may shortchange the chance of recapture above the dam and suggested tagging all eels. Fritz Hoogakker, Dominion Energy, commented that it would be important to have a limit of some sort because they occasionally collect eels by the hundreds at the Roanoke Rapids Project, and it would not be feasible to manually tag several hundred eels. No cap was decided on at the current time. Dominion Energy biologists will continue to tag and fin clip all eels captured, as applicable, and use their discretion if a large number of eels are collected at once.

[2] Eels are sedated by AQUI-S in batches.

Hunter Roop, GAWRD, asked if there was a reason to not electro fish above the Project dam. Caleb responded that through previous FPTWC discussions, it was determined that there is likely a visibility issue with electrofishing in the reservoir; however, he is open to doing that in future seasons.

Caleb added that currently both the Georgia and South Carolina shoreline and shoal near the middle of the Project dam are "hot spots" for eel aggregation. Caleb believes the commonality among these three sites is substrate.

Kevin Mack, NMFS, suggested placing captured eels (5-10 individuals) in the live well of the eel ramp as their pheromones are likely to attract other eels. Through group discussion, it was agreed to not tag the eels upon placing them in the live well, but they can be tagged during the next ramp check along with any captured eel.

Elizabeth Miller, SCDNR, asked the FPTWC if it was known if the eels were stacking up at Project dam at primarily those three locations because they cannot pass over it. The answer is currently not known.

The committee deliberated if there should be a cap on the length of eel that is tagged; the largest that has been collected thus far was 610 mm. Keith Whalen, USFS, commented that if the eel is not changing color, they have the potential to move upstream despite their size. The group agreed to not put a limit on the size of eel tagged for the time being.

The group briefly discussed the original entrainment study that was conducted at the Project around 1993. Approximately 600 eels were sent through the turbines, but it was not known where the eels were collected from such as in the reservoir.

Ray Ammarell, Dominion Energy, explained that there are holes in the navigation lock that likely produce flowage from one side of the Project dam to the other allowing eels to pass through. Eels could also be traversing through the drain hole tunnels for the two powerhouse empty bays. There is no quantification of leakage from the Project dam.

The FPTWC inspected the eel ramp on the Georgia shoreline below the Project powerhouse. The Project operations were approximately at 30-35 percent gate and a few of the 4-foot flashboards were down. The USACE[3] was forecasted to release a steady flow from the upstream J. Strom Thurmond Dam (not peaking). The committee then visited the powerhouse empty bays and navigation lock.

[3] USACE: United States Army Corps of Engineers

Following the inspection, Caleb reviewed with the group some of the discussion that took place at the eel ramp and bay/navigation lock. The FPTWC agreed that eel pots would be deployed in the navigation lock and within the empty bay closest to the navigation lock.

The committee discussed fin clipping and release of any eels collected by the pots. Bill suggested that ice could be used to assist with fin clipping and the eels be released at the point of capture, which was agreeable to Dominion Energy and the remaining attending FPTWC members.

It was noted that large eel (i.e., 610 mm) are unlikely to be captured via the pots, which may potentially skew the results of the study, particularly as it relates to recapture rate. Fritz commented that it is likely to be such a small number of eels to not make a difference. Keith added that the large eels could be removed from analysis. The FPTWC agreed to not capping the size of eels tagged.

The group discussed moving one of the two hoses installed at the top of the eel ramp to further down near the bottom. Jesse Waldrip, Kleinschmidt, commented that the idea is that moving a hose would result in less flow for the eels to have to swim against and more attraction flow (splashing) at the bottom of the ramp. Dominion Energy will modify the ramp equipment accordingly. Biologists will monitor the ramp for a couple of weeks following the modifications to the hose and intake (to prevent crayfish clogs) but is considering the need for purchasing an additional pump.

Alosine Passage

Fritz presented an overview of the Spring 2025 American Shad Spawning Habitat Suitability Study Plan (HSI Study), which was provided to the FPTWC ahead of the meeting. In summary, sampling efforts will include measurement of habitat characteristics pertinent to American Shad spawning success in Stevens Creek downstream of Prices Mill Dam and Turkey Creek downstream of the SSR 35 bridge (as identified in the HSI Study). All sites surveyed will be assigned a suitability index of 0-1 based on the methodology outlined in Hightower et al. (2012). The HSI Study will be carried out in such a manner that the data collected will be appropriate to perform a similar analysis of Robust Redhorse habitat in the system if it is desired.

Fritz commented that they initially identified the spring of 2025 as the target to conduct the study but wanted to discuss timing with the committee. Fritz does not believe it is necessary to conduct the study during the appropriate spawning window for American Shad as Dominion Energy biologist will target the appropriate flow (approximately 175 cubic feet per second [cfs]). It was explained that the flow was based on a flow exceedance curve that was

developed by Bjorn Lake, NMFS,[4] based off the USGS[5] gage no. 02196000 "Stevens Creek Near Modoc, SC."

Fritz provided an update on accessing some of the study sites. He and Paul Vidonic, Dominion Energy, conducted reconnaissance of several sites on March 19, 2025. The USGS Modoc gage was recording approximately 3.2 feet at the time, which is near the height for HSI Study survey conditions. Fritz believes he will be able to access the uppermost site on Turkey Creek; however, he is concerned about downed trees in the downstream reach making some sites inaccessible. Fritz believes the uppermost Stevens Creek sites are floatable. He has attempted to contact the landowner of Prices Mill but is awaiting a response. It was noted that the USFWS has designated critical habitat for Carolina Heelsplitter near Prices Mill and may have contact information. Fritz will continue to pursue access. Keith stated that the USFS has a service road that goes to the site at the confluence of Stevens Creek and Turkey Creek, but he is unaware if it is currently drivable. Keith continued that the USFS has received funds to continue removing downed trees and opening roads back up so the service road should be accessible later in 2025 if not already.

Kevin commented that NMFS was good with the number of sites for the HSI Study. Elizabeth commented that she emailed SCDNR's malacologist regarding accessing upper Stevens Creek and Turkey Creek and the malacologist responded that there were indeed some downed trees. Elizabeth to provide Fritz with the malacologist's contact information.

Fritz led the group through a discussion of a typical site work-up. Dominion Energy identified specific coordinates to survey in the HSI Study but will be using best judgment to determine the best area within the vicinity of the coordinates that has the most potential to be suitable American Shad habitat. Biologists will perform a transect across the wetted width of the creek channel and take measurements every one meter for depth, water velocity, and substrate. Cover types and water quality measurements will also be recorded. Biologists will also take pictures at every site both upstream and downstream.

Kevin commented that he was agreeable to the timing of the HSI Study in that it occurring in the spring is not necessary; anytime in 2025 is acceptable. Keith added that if surveying was pushed back to the fall, it would better guarantee access to site(s) via USFS service roads. Ray noted that the fall low flow period does not typically start until November. The attending members of the FPTWC agreed to modify the study period for the HSI Study to occur sometime within the 2025 calendar year.

[4] Bjorn Lake, NMFS, is a frequent attendee of the FPTWC but was not in attendance for the current meeting.
[5] USGS: United States Geological Survey

Fritz continued that the sites to be resurveyed at 1,000 cfs would just include those with favorable substrate. Fritz stated that the analysis would consider the percentage of sites that would be suitable rather than an average value across creeks.

Next Steps

Alison explained that the next FPTWC discussions would likely depend on FERC's[6] REA[7] Notice and the subsequent Section 18 prescriptions and 10(j) recommendations from the agencies. Once the REA Notice is issued, which is currently anticipated to be summer of 2025, the committee could convene to align the Fish Passage Adaptive Management Plan with the prescriptions and recommendations to be filed. Because calendars tend to fill up quickly, it was suggested to schedule a meeting as a placeholder that could be rescheduled or cancelled as needed. Kleinschmidt will email an availability poll to the FPTWC for coordinating the next meeting date.

NMFS and USFWS are not planning to file a joint prescription, but it was agreed that both prescriptions are ideally similar.

Fishery Resources Enhancement Fund

Dominion Energy is proposing to continue with the Fishery Resources Enhancement Fund (Fisheries Fund) through the Project new license term in the amount of $8,250 (2023 dollars, adjusted for inflation). Amy will distribute the charter, budget, and studies conducted for the current Fisheries Fund to the committee. The current amount of the Fisheries Fund as of December 31, 2024, is $131,151.27. Dominion Energy would like to discuss any changes to the Fisheries Fund for the new license at the next FPTWC meeting.

The meeting was adjourned.

ACTION ITEMS:

- Dominion Energy biologists to modify the eel ramp as agreed upon.
- Dominion Energy biologists to follow Eel Study plan modifications as agreed to.
- Kleinschmidt to send availability poll for the next FPTWC meeting.
- Dominion Energy to distribute information regarding the Fisheries Fund.

[6] FERC: Federal Energy Regulatory Commission
[7] REA: Ready for Environmental Assessment