Dominion Energy Diadromous Fish Restoration Technical Advisory Committee Discussion - January 18, 2023 FINAL MEETING MINUTES

Call Participants:

Dominion Energy – Ben Rice, Corey Chamberlain, Chris Cudd, Erick Austin, Pete Sturke, Tom Effinger, John Swenarton, Paul Vidonic, Taylor Allen, Ben Eberline NMFS – Fritz Rohde, Twyla Cheatwood, Bjorn Lake, Kevin Mack USFWS – Jesus Morales NCWRC – Jeremy McCargo, David Belkoski, Kirk Rundle NCDMF – Todd Mathes VDWR – Dan Michaelson NCSU – Wilson Laney Alumni – Bob Graham

Ben Eberline convened the meeting around 10:03 AM. He thanked everyone for their December 15 responses to Dominion Energy's November 30, 2022, email requesting concurrence. He noted Dominion felt the response regarding downstream survival was a bit different than where we landed at our last meeting. All have agreed on best technology. Dominion would like to agree on a standard for downstream American Eel survival. What Dominion has in hand (as far as concurrence response), he indicated, is not sufficient for their executive management to move ahead with the fish friendly turbine project. Fritz Rohde noted he was having trouble understanding why Dominion's executive management is having issues. Fritz noted the agencies are on board with the fish friendly turbine, and asked Ben to explain. Ben E. asked Ben Rice or Chris Cudd to explain.

Ben Rice noted they are seeking concurrence on Article 401. Dominion understands the survival number is dynamic. Dominion does not want to get into a situation where they are told the project did not work and are required to spend additional capital money. He would like the DFRTAC to realize that Dominion is taking a risk, and the technology Dominion is proposing to use will benefit other facilities in the industry as well. Dominion needs a survivability number to set as a performance standard ahead of time to objectively measure success. Ben Eberline added that Dominion also must consider financial impact to their customers for large capital investments such as the fish friendly turbine project.

Bjorn Lake stated the agencies have to consider the whole watershed. The Dominion 11/30/22 memo gave him pause. The agencies have to treat all the facilities in the watershed equitably. The DFRTAC was not comfortable providing a total Roanoke Rapids Power Station survival number as a performance standard at this time. He asked when a number is needed. He was okay with a minimum of 85% survival for the individual turbine during the procurement process, but NMFS has to put the performance standard in context of Kerr and upstream areas before settling on a Project performance standard.

Ben Rice said success to him would be DFRTAC's approval of the proposed FFT at Unit 1. Dominion staff will need to recommend the fish friendly turbine project to their executive management for approval in March 2023. Those executives will want to know if Dominion may also have to replace additional turbines.

Corey Chamberlain asked when will Kerr provide passage? He surmised probably not until after the Roanoke Rapids/Gaston Project license expires in 2044. He noted that 2044 (referencing the expiration

of Roanoke Rapids/Gaston license) sounds like a long time away, but not really when considering construction, implementation, testing, and relicensing timelines. Corey asked if we could put off the eel total survival performance standard until the next license. Corey felt the Army Corps of Engineers would resist putting in any eel passage.

Bjorn noted both NMFS and USFWS have a nexus to the Corps and would have an opportunity to make recommendations on fish passage. He noted that he would be comfortable saying "put this turbine in now" and Dominion wouldn't have to replace another, until at least the next license. He was more comfortable saying that, as opposed to stipulating a total survival performance standard now.

Ben Rice said that he could explain that to Dominion's executive management. Ben then asked Corey Chamberlain for concurrence. Corey agreed, noting it would become a two-step process, which some may not like. Tom Effinger said that would work for his areas of responsibility as well. He thought he could endorse that to executive management as well as provide project need justification to any SCC filings related to customer costs. He noted that having the project scope defined with a ceiling until at least 2044 would be extremely helpful. Ben Eberline agreed it made sense to not set a total performance standard now. Bob Graham noted Dominion would usually begin the relicensing process at least 5 years prior to expiration, so that would enable more consideration of the whole watershed perspective.

Ben Eberline asked if Bjorn's approach was reasonable for everyone. Ben Rice restated: **DFRTAC is on board with a fish friendly turbine that provides a minimum of 85% survivability installed at Unit 1 with no further passage discussions until the new license.** Fritz said he was good, noting if the turbine is in by 2027, then testing for 5 years, that would be 2032. Bjorn clarified by asking if Dominion wanted DFRTAC to agree that no other major capital improvements would be requested. Ben Rice agreed and asked about sitting down with DFRTAC to develop an optimized operational plan considering the fish friendly turbine within the bounds of their license. Ben Rice noted if DFRTAC and Dominion can commit to this being the sole capital investment, that puts Dominion in a good position. Tom Effinger agreed. Tom asked how nightly shutdowns would enter into the picture. Bjorn said as long as other operational measures could be considered, he was okay with taking nighttime shutdowns off the table. Jesus Morales was in concurrence. Jesus noted we are getting much better at forecasting. Things can be done to improve passage operationally within the boundaries of the license; it is just a matter of creating a good decision tree. Dominion and DFRTAC could customize operations based on better forecasting. Fritz noted he was okay with eliminating nighttime shutdowns given the new technology.

Twyla Cheatwood circled back to the proposed timeline and asked how many years of study, post-new turbine install, would be conducted. She noted we still would have to span some years to consider how the turbine performs. Ben Rice said he would be good with five years or more, and the DFRTAC would be involved in the study design and duration requirements. Pete Sturke said that would definitely be done, and study design would depend on specific research questions that need to be answered, noting however that you can never depend on how the eels will behave. Corey noted there are other ongoing studies as well that would add to the discussion. Pete noted the value of Roanoke Rapids Power Station being on the cutting edge for a while and how it has helped others along the way.

Ben E. said fish friendly turbine studies would be on the DFRTAC agenda for a good while to come. He then thanked everyone again for their input and noted he would use Wilson's notes to prepare the record. Wilson stated what he heard and captured: (1) Dominion is to proceed with the fish friendly turbine project, (2) nighttime shutdowns would not be considered, (3) Dominion and DFRTAC to

develop optimized operational plan, (4) Dominion and DFRTAC to develop fish friendly turbine American Eel study plan. Bob Graham noted there would be no total survival performance standard and Fritz clarified there would be no total survival performance standard for the facility, but the 85% minimum turbine survival would remain for Dominion's vendors. Dan Michaelson noted that the provisions would be in place until the next license.

Ben Eberline asked the group if anyone objected to Wilson's summary of the outlined path forward. No objections were noted from the members of the DFRTAC, which included representatives from all agencies (NMFS, USFWS, NCWRC, NCDEQ, VDWR) that were in attendance during this meeting.

Ben Eberline and Ben Rice thanked everyone again for their time and support. Tom Effinger noted his appreciation as well. Tom and Ben R. then asked for agreed upon language by the end of February.

Meeting adjourned 10:55 AM.