



Reply to
Attention of

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1096

NOVEMBER 25, 2015

Southern Virginia Regulatory Section
NAO-2012-00080 / 13-V0408 (James River)

Ms. Christine Vaccaro
Protected Resources Division
National Marine Fisheries Service / Northeast Regional Office
55 Great Republic Drive
Gloucester, Massachusetts 01930-2276

Dear Ms. Vaccaro:

On June 10, 2015, informal Section 7 Endangered Species Act (ESA) consultation was reinitiated regarding modifications associated with Dominion Virginia Power's proposed Surry-Skiffes Creek-Wheaton 500 kV aerial transmission line project on the James River. We continue to seek concurrence of a not likely to adverse effect determination. This coordination package serves to address follow-up comments received on June 23, 2015 (Attachment 1).

As previously coordinated, Dominion's proposed project has evolved from "conceptual" to "final design". As such, specifications on the seventeen transmission towers and four fender protection systems proposed for construction within the James River have been modified. These modifications have created habitat and acoustic impacts beyond the scope considered during NOAA's April 16, 2014 "not likely to adversely affect" concurrence (Attachment 2). The proposed project site (Attachment 3) remains at a distance of approximately 30 miles upstream from the confluence with the Chesapeake Bay in water depths ranging from 2 to 20 feet at a river width of approximately 2.84 miles. The proposed transmission alignment and structure locations remain the same; however with this "final design" 2712 square feet of direct impacts to subaqueous river bottom will be caused by the installation of 656 steel or fiber hollow piles, ranging in diameter from 24 to 30 inches.

Tower Foundations: The seventeen towers proposed for construction within the James River will be steel lattice structures, each requiring four separate foundation leg supports. Cumulatively these foundation supports will consist of (416) 24-inch outer diameter hollow steel piles, each installed within a 26-inch outer diameter protective fiberglass sleeve. Details on the number of pilings for each foundation type (PP4, PP8, and PP10) are provided in Attachment 4. Steel piles will be installed via impact hammer, while protective sleeves will be hand-jetted. The encasement sleeves will be backfilled with grout poured from the surface, completely sealing the pile and preventing grout from being released into the water column. Finally, a concrete cap will be constructed on top of the piles approximately 7 feet above mean high water (MHW) creating the base for each leg of the lattice tower.

Fender Systems: These navigational protective structures (Attachment 5) will be installed adjacent to the Tribell Shoal Federal Navigation Channel and Secondary Barge Channel. Each of the four fenders will be 600 linear feet and constructed with 12-inch by 12-inch fiberglass reinforced sea timber wales attached to 30-inch diameter hollow fiber piles on

typical 10-foot centers. Installation of fiber piles may either be via impact or vibratory methods. Five wales will be attached to each fiber pile starting at approximately MHW elevation and extending 9 feet above MHW to the top of the fiber pile. Each sea timber wale will be spaced using 8-inch by 12-inch by 12-inch sea timber blocks. A total of 60 fiber piles will be required for each fender system.

James River Crossing Structure Information Table:

Structure No.	Impact No.	Tower Design/ Foundation System	Size of Tower Footprint (ft. x ft.)	Permanent River Bottom Impact (SF)	Subaqueous Encroachment (SF)	# of Pilings
582/12	PU1	5V DEA/PP8	58 x 58	118	3364	32
582/13	PU2	5V HT/PP4	39 x 32	59	1248	16
582/14	PU3	5V HT/PP4	39 x 32	59	1248	16
582/15	PU4	5V HA/PP8	51 x 51	118	2601	32
582/16	PU5	5V HT/PP4	39 x 32	59	1248	16
582/17	PU6	5V HT/PP4	39 x 32	59	1248	16
582/18	PU7	5V HT/PP4	45 x 37	59	1665	16
582/19	PU8	5V HT/PP4	45 x 37	59	1665	16
582/20	PU9	5V DEA/PP8	58 x 58	118	3364	32
582/21	PU10	Channel Crossing/PP10	72 x 72	148	5184	40
582/22	PU11	Channel Crossing/PP10	72 x 72	148	5184	40
582/23	PU12	5V HT/PP4	52 x 42	59	2184	16
582/24	PU13	5V HT/PP4	52 x 42	59	2184	16
582/25	PU14	Channel Crossing/PP10	68 x 68	148	4624	40
582/26	PU15	Channel Crossing/PP10	68 x 68	148	4624	40
582/27	PU16	5V HT/PP4	50 x 40	59	2000	16
582/28	PU17	5V HT/PP4	50 x 40	59	2000	16
582/21 Fender	PU40	-	-	294	894	60
582/22 Fender	PU40	-	-	294	894	60
582/25 Fender	PU41	-	-	294	894	60
582/26 Fender	PU41	-	-	294	894	60
Total				2,712	49,211	656

Impact versus Vibratory: The use of vibratory hammers was recommended and considered by the applicant; however the use of impact hammers must be used for all steel pile foundations to ensure proper load capacities are achieved. Dominion has provided additional details as to why impact hammers versus vibratory must be used for the construction of all tower foundations (Attachment 6).

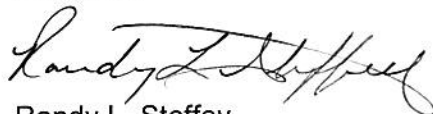
Avoidance & Minimization Measures: Dominion has proposed to incorporate several agency recommended construction techniques to help avoid and minimize species interaction and acoustic effects during construction.

1. All pile driving work within deep water habitat areas (depths greater than 12 feet) will only occur between November 16th and February 14th of any given year. This involves structures 21, 22, and 24-26. In order to accomplish pile driving activities outside of the time of year restriction, Dominion may utilize more than one pile driving rig at a time.
2. Bubble curtains will be used at all times during pile driving activities at all structures to attenuate the noise associated with impact hammering.
3. Ramp-up methods, which will gradually increase impact hammer intensity over the course of single pile install, will be used for all pile driving activities.

Despite these structure modifications, the incorporated avoidance and minimization measures will provide added species protection. Based upon previous agency correspondence to date, effects on Atlantic Sturgeon, Sea Turtles, Anadromous Fish, and Essential Fish Habitat caused by impacts to acoustics, water quality, habitat, and vessel interaction will remain at levels equal to or lower than those used to reach a not likely to adverse effect concurrence in April 2014. We are requesting new concurrence within 30-days from the date of this letter.

Should you have any questions or require further information on this submittal, please do not hesitate to contact me at (757) 201-7579 or via email at randy.l.steffey@usace.army.mil. Thank you for your assistance.

Sincerely,



Randy L. Steffey
Project Manager, Southern Virginia
Regulatory Section

Enclosures

David O'Brien, NOAA
Amy Ewing, DGIF
Bob Greenlee, DGIF