

Monthly Mariner's Update for Coastal Virginia Offshore Wind	Date of Applicability	04 December 2024
	Issue:	12/24
	Revision:	00

The goal of the Monthly Mariner's Update is to give a high-level overview of ongoing and planned nearterm construction activities and the vessels involved. Questions regarding construction operations are welcome, preferably well in advance of each construction activity. These questions and comments can be directed <u>here</u>.

- Weekly updates are published in the USCG Local Notice to Mariners which can be found here.
- Weekly updates to the published USCG Light List marking turbine locations can be found here.
- Previous issues of the Mariner's Update and additional resources can be found here.

Project Background Information

Offshore construction work for Coastal Virginia Offshore Wind (CVOW) commenced in February 2024 with relocation of Munitions of Explosive Concern (MECs). Monopile foundation installation began in May 2024 and subsea cable installation activities began in August 2024.

Dominion Energy will construct, own and operate the Coastal Virginia Offshore Wind (CVOW) Project (hereinafter referred to as the Project). The Project is located in the Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf Offshore Virginia (Lease No. OCS-A 0483), with buried subsea cables connecting CVOW to shore. The purpose of this Project is to provide 2.6 gigawatts of clean, reliable offshore wind energy to our customers, while providing substantial economic and environmental benefits to the Commonwealth of Virginia.

Offshore components of the Project will consist of the following:

- 176 Wind Turbine Generators (WTGs), each with a capacity of 14.7 megawatts, and associated monopile foundations;
- Three (3) Offshore Substations (OSS);
- Approximately 231 miles (372 kilometers) of total length of Inter-Array Cables (IACs) in the CVOW Lease Area; average IAC length of 5,868 feet (1,789 meters) between WTGs and connected to OSSs; and
- Nine (9) buried submarine high-voltage alternating-current Offshore Export Cables (OECs), approximately 350 miles (563 kilometers) of total length, connecting the OSSs to shore at the State Military Reservation (SMR) in Virginia Beach, VA.

The offshore project components, including the WTGs, OSSs, IACs and OECs, will be located in federal waters in the OCS-A 0483 Lease Area (Lease Area). Portions of the OECs will also be located in Commonwealth of Virginia waters (within three miles of shore).





Boundary of CVOW project



WTG and OSS Layout

CVOW GIS Shapefiles of the project area and export cable corridor are available <u>here</u> for download.



Work planned for the period of December 1, 2024, to December 31, 2024

- The M/V YELLOWSTONE will join the M/V FLINTSTONE and continue to install rock scour protection at the installed foundation locations.
- The CLV LIVINGSTONE will conduct OEC installation within the cable corridor and into the Lease Area, beginning approximately 12-nautical miles offshore.
- Transition Piece installation begins with the ORION being supported by the tugs OCEAN WAVE and ALERT as well as the barges 455 and JULIE B.
- Pre-Lay Grapnel Runs (PLGR) along the IAC routes within the Lease Area will begin using the tug WASHINGTON.
- Multiple large project components will continue to arrive and be staged at the Portsmouth Marine Terminal.
- Ongoing fisheries resource studies in and around the Lease Area.

CVOW Marine Coordination Center

The CVOW project established a shoreside Marine Coordination Center (MCC) to monitor and coordinate all offshore activities related to project construction and operations. The MCC is manned 24 hours a day, 7 days a week and can provide further project details if required.

Marine Coordination Center Contact	757-366-7000 (desk)
	757-731-8307 (cell)
	Email: <u>CVOWOps@dominionenergy.com</u>

Offshore Installation Activities

The installation (pile driving) operations of monopiles for the WTGs and pin piles for the OSSs have paused from November 2024 through April 2025, the duration of the NARW migration period. To date, seventy-eight (78) monopile foundations have been installed and the four (4) pin piles for one (1) OSS have been installed. The installation of rock scour protection at the base of the monopile foundations will continue in December 2024 with the M/V FLINTSTONE and M/V YELLOWSTONE.

Through the remainder of 2024 and into 2025, OEC cable installation will continue with the Cable Lay Vessel (CLV) LIVINGSTONE operating from a position beginning ~12-nautical miles from shore and working towards the Lease Area. Pre-Lay Grapnel Runs (PLGR) along the IAC routes within the Lease Area will begin in December using the tug WASHINGTON.

Towards the end of December, we will begin preparations for the fitting of Transition Pieces (TP) over the installed foundations. The M/V ORION will remain in the lease area, while a tug and barge "feedering" arrangement will transport TP from Portsmouth Marine Terminal to the lease area. The green area marked in the image below indicates the area of completed monopile installations, which is where the TP installation activities will be conducted. Specific locations for installed monopiles are provided in a table at the end of this publication.



For the duration of these operations, we will continue to have safety vessels deployed in the area. These vessels will be a rotation of commercial fishing vessels, which may consist of the Capt. Danny, the Alliance, the Atlantic Bounty, and others.



Marine Lighting on Monopile Foundations



Once monopiles are installed in the seabed, quick-flashing yellow marine navigation lights will be installed and in operation from sunset to sunrise. Updates to the lighting installations will be published in the USCG Local Notice to Mariners and USCG Light List.

Please report any malfunctioning lights to the safety vessel on site and/or the Marine Coordination Center (MCC).

Monopile foundations extend 15 feet above sea level; extreme caution should be exercised when operating in the area. For up-to-date status of foundation installations, please refer to the USCG Local Notice to Mariners.

Rock Placement Around Foundations

The M/V FLINTSTONE and M/V YELLOWSTONE will be conducting rock scour protection installation activities at the base of the installed monopiles, which will continue through the end of January 2025 before pausing once again.

USCG Safety Zone in Effect at Installation Sites

The U.S. Coast Guard has established 179 temporary 500-meter safety zones around the construction of 176 wind turbine generators and three (3) offshore substations in Federal waters on the Outer Continental Shelf, east northeast of Virginia Beach, Virginia. This action is necessary to protect life, property and the environment during construction of the foundations and the subsequent installation of the turbine components, from May 1, 2024, to May 1, 2027. When enforced, only attending vessels and those vessels specifically authorized by the Fifth Coast Guard District Commander, or a designated



representative, are permitted to enter or remain in the temporary safety zones. Each of the 179 temporary safety zones will be enforced individually, for a period lasting approximately 48 hours, as construction progresses from one structure to the next.

Buoy Installations Supporting the Monopile Installation Activities

The acoustic measurement and monitoring buoys, and meteorological buoys deployed in the lease area during pile driving operations have been decommissioned and removed from the site. When monopile installation activities resume in May 2025, these buoys will be redeployed and their locations shared. Reference previous CVOW Mariner Updates and USCG Local Notice to Mariners for more details on locations and timelines.

Seabed Preparation and Cable Installation

Four (4) of the nine (9) deep water sections of export cables have been trenched and installed, totaling nearly 135 km in length. Each cable is secured at either end by a mushroom anchor. The OECs remain exposed where they cross the existing, charted subsea telecommunications cables. We ask that all mariners be mindful of these cables and avoid anchoring or any other seabed impacting activities in the vicinity of the cables.

Crossing Locations:

DUNANT & MAREA Crossing Polygon (18 crossings in total):

- 36° 49.530'N 75° 34.950'W
- 36° 49.460'N 75° 34.390'W
- 36° 49.000'N 75° 34.630'W
- 36° 49.080'N 75° 35.230'W

BRUSA East Circle (3 crossings) 0.15nm radius around:

• 36° 48.510'N - 75° 35.400'W

BRUSA West Circle (3 crossings) 0.15nm radius around:

• 36° 48.650'N - 75° 36.280'W

The Cable Lay Vessel (CLV) LIVINGSTONE will continue OEC installation activities in December 2024. These activities will take place within the identified cable corridor, beginning at a position ~12-miles offshore, and into the lease area. In late January, the nearshore OEC installation phase from shore to the location ~12-nm offshore will commence. Further details on this phase will be included in the January edition of the Mariner's Update

Pre-Lay Grapnel Runs (PLGR) along the IAC routes within the Lease Area will begin in December using the tug WASHINGTON.

Port Operations

During the month of December, large components such as monopiles and transition pieces will continue to arrive and be staged at Portsmouth Marine Terminal.

	inergy [®] Of	ffshore Wind
Total Components Delivered to Portsn	nouth Marine Term	inal
Monopile Foundations	110	
Transition Pieces	51	
Offshore Substation Pin Piles	12	
Pin Pile Templates	1	

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Transition pieces and foundations staged at Portsmouth Marine Terminal

Fisheries Resource Characterization Studies

Dominion Energy continues working with the Virginia Institute of Marine Science (VIMS), the Virginia Marine Resource Commission (VMRC), and commercial fishermen to study Black Sea Bass and Channeled Whelk in and near the Project area, especially the areas shown in the chartlet below. The use of new acoustic release device technology avoids the need for vertical lines and marker buoys in the water.

- **Black Sea Bass:** The study consists of eight (8) strings of ventless traps with 6 traps per string. Sampling once per month, with a 48-hour soak and acoustic release buoys are utilized to recover the gear. The chart below displays the study area, which includes locations south of the Lease Area. The study is currently taking place utilizing the VIMS R/V Bay Eagle and will continue throughout 2024. The study area is outlined in pink below.
- **Channeled Whelk:** The study uses eighteen (18) strings of seven (7) pots, a 48-hour soak time and recovery by acoustic release buoys. This cooperative study will be completed in partnership with local commercial whelk fishermen, and activities will continue throughout 2024. The study area includes the southern portion of the CVOW lease site (with future turbine locations) and a control area outside the Lease Area. The entire study area is outlined in green below.





 Atlantic Surfclam: The final report for the Atlantic Surfclam surveys that were conducted in June of 2023 has been published and is available on the CVOW Project Website <u>here</u>. This survey was a collaborative effort between VIMS, Rutger's University, VMRC, and Dominion Energy.



Recreational Fisheries and Public Access

- Access to the lease area for recreational activities is unrestricted unless construction activities are active.
- If construction activities are active, a **500-meter standoff distance is requested**.
- If Mariners have questions about access, the onsite project safety vessels can provide direction via VHF Marine 16. Alternatively, mariners may reach out directly to the CVOW Marine Coordination Center (757-366-7000)

** <u>Mariners are reminded not to touch or tie off to monopiles and to remain vigilant for other</u> <u>vessels, including operational Project vessels, in the area.</u>**



Project Vessels as of December 1

NAME	LENGTH	CALL SIGN	VESSEL NUMBER	MMSI	TYPE AND PURPOSE
Wind Turbine Generator (WTG) Installation and Support Vessels					
FLINTSTONE	507'	PBZD	9528433	245861000	Scour Protection (Rock) Installation Vessel
YELLOWSTONE	623'	LXAM7	9464792	253000108	Scour Protection (Rock) Installation Vessel
ORION	705'	ORMB	9825453	205755000	Transition Piece (TP) Installation Vessel
OCEAN WAVE	146'	WDG3180	9554004	367523340	Tug for Feeder Barge
ALERT	140'	WCZ7335	9214381	366779420	Tug for Feeder Barge
JULIE B (barge)	400'	N/A	N/A	N/A	Transition Piece Feeder Barge
455 (barge)	400'	N/A	N/A	N/A	Transition Piece Feeder Barge
Cable Installation and Seabed Preparation Vessels					
LIVINGSTONE	528'	PBXN	9776925	244010952	Cable Installation Vessel
WASHINGTON	120'	WDH3844	9730646	367611520	Pre-Lay Grapnel Run (PLGR) Vessel
			Safety Vessels		
CAPT DANNY	83'	WDL7090	N/A	368157020	Fishing Vessel – Project Safety Vessel
ALLIANCE	111'	WDF7948	N/A	366384000	Fishing Vessel – Project Safety Vessel
ATLANTIC BOUNTY	81'	WDB8620	N/A	366961860	Fishing Vessel – Project Safety Vessel
Transportation Vessels					
SUN RISE	554'	D7GU	9623219	440032000	Heavy Lift Transport Vessel
SUN SHINE	571'	D7DB	9471616	440040000	Heavy Lift Transport Vessel
Fisheries Resource Characterization Vessels					
R/V BAY EAGLE	65'	WBR3978	N/A	366749460	Research Vessel
F/V THOMAS REED	49'	SURV1	N/A	367187470	Commercial Fishing Vessel
F/V LADY ISLA	47'		1090997	338495354	Commercial Fishing Vessel

Mariners and the public are reminded that due to the nature of the construction activities, project vessels are often restricted in their ability to maneuver. It is requested that mariners communicate with project vessels on Channel 16 VHF to coordinate any necessary passing arrangements. Safety vessels will be on scene to assist with the coordination of commercial and public marine traffic and project vessels.

Installed Components:					
	Name	Туре	Coordinates	Installation date	
1	G2K04	Monopile	36.869196°N 075.456227°W	22 May 2024	
2	G2J05	Monopile	36.884680°N 075.442662°W	26 May 2024	
3	G2J04	Monopile	36.884621°N 075.458216°W	28 May 2024	
4	G2J03	Monopile	36.884560°N 075.473769°W	31 May 2024	



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5	G2H05	Monopile	36.900106°N 075.444659°W	4 June 2024
6	G2H06	Monopile	36.900163°N 075.429103°W	7 June 2024
7	G2K03	Monopile	36.869135°N 075.471777°W	8 June 2024
8	G2J06	Monopile	36.884737°N 075.427109°W	14 June 2024
9	G2H04	Monopile	36.900047°N 075.460216°W	16 June 2024
10	G2H03	Monopile	36.899985°N 075.475772°W	17 June 2024
11	G2K05	Monopile	36.869255°N 075.440677°W	18 June 2024
12	G2G06	Monopile	36.915589°N 075.431087°W	19 June 2024
13	G2G05	Monopile	36.915531°N 075.446646°W	20 June 2024
14	G2F07	Monopile	36.931061°N 075.417520°W	22 June 2024
15	G2E07	Monopile	36.946487°N 075.419502°W	23 June 2024
16	G2F06	Monopile	36.931005°N 075.433082°W	25 June 2024
17	G2F03	Monopile	36.930826°N 075.479770°W	26 June 2024
18	G2G03	Monopile	36.915410°N 075.477765°W	28 June 2024
19	G2F04	Monopile	36.930888°N 075.464208°W	29 June 2024
20	G2F05	Monopile	36.930947°N 075.448645°W	01 July 2024
21	G2E06	Monopile	36.946431°N 075.435068°W	02 July 2024
22	G2E05	Monopile	36.946373°N 075.450634°W	03 July 2024
23	G2E03	Monopile	36.946250°N 075.481765°W	04 July 2024
24	G2D06	Monopile	36.961856°N 075.437065°W	05 July 2024
25	G2D04	Monopile	36.961737°N 075.468203°W	06 July 2024
26	G2C05	Monopile	36.977382°N 075.455728°W	09 July 2024
27	G2D05	Monopile	36.961798°N 075.452634°W	10 July 2024
28	G2D07	Monopile	36.961912°N 075.421496°W	13 July 2024
29	G2D08	Monopile	36.961966°N 075.405927°W	14 July 2024
30	G2B06	Monopile	36.992697°N 075.441051°W	15 July 2024
32	G2C06	Monopile	36.977281°N 075.439052°W	17 July 2024
33	G2E08	Monopile	36.946541°N 075.403936°W	19 July 2024
34	G2B07	Monopile	36.992754°N 075.425476°W	20 July 2024
35	G2D09	Monopile	36.962019°N 075.390358°W	21 July 2024
36	G2F08	Monopile	36.931114°N 075.401957°W	22 July 2024
37	G2G08	Monopile	36.915697°N 075.399967°W	22 July 2024



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38	G2G04	Monopile	36.915697°N 075.399967°W	25 July 2024
39	G2D11	Monopile	36.962117°N 075.359220°W	28 July 2024
40	G2E11	Monopile	36.946690°N 075.357238°W	29 July 2024
41	G2D10	Monopile	36.962069°N 075.374789°W	29 July 2024
42	G2E09	Monopile	36.946592°N 075.388370°W	31 July 2024
43	G2H08	Monopile	36.900271°N 075.397990°W	2 August 2024
44	G2F11	Monopile	36.931263°N 075.355268°W	3 August 2024
45	G2F10	Monopile	36.931216°N 075.370831°W	4 August 2024
46	G2G10	Monopile	36.915798°N 075.368848°W	5 August 2024
47	G2F09	Monopile	36.931166°N 075.386394°W	6 August 2024
48	G2G09	Monopile	36.915749°N 075.384408°W	7 August 2024
49	G2J07	Monopile	36.884792°N 075.411556°W	10 August 2024
50	G2H09	Monopile	36.900322°N 075.382433°W	11 August 2024
51	G2J09	Monopile	36.884896°N 075.380449°W	12 August 2024
52	G2K09	Monopile	36.869469°N 075.378476°W	12 August 2024
53	G2K08	Monopile	36.869419°N 075.394026°W	13 August 2024
54	G2K07	Monopile	36.869366°N 075.409577°W	14 August 2024
55	G3H12	Monopile	36.900463°N 075.335763°W	18 August 2024
56	G2K10	Monopile	36.869518°N 075.362926°W	21 August 2024
57	G2H07	Monopile	36.900218°N 075.413546°W	21 August 2024
58	G2K06	Monopile	36.869311°N 075.425127°W	22 August 2024
59	G3H13	Monopile	36.900506°N 075.320207°W	23 August 2024
60	G3J13	Monopile	36.885079°N 075.318235°W	23 August 2024
61	G3G11	Monopile	36.915845°N 075.353288°W	25 August 2024
62	G3J12	Monopile	36.885036°N 075.333788°W	26 August 2024
63	G3H14	Monopile	36.900547°N 075.304650°W	26 August 2024
64	G3G14	Monopile	36.915975°N 075.306609°W	27 August 2024
65	G3G13	Monopile	36.915934°N 075.322169°W	28 August 2024
66	G3G12	Monopile	36.915891°N 075.337728°W	29 August 2024
67	G2E04	Monopile	36.946312°N 075.466199°W	31 August 2024
68	G2E10	Monopile	36.946642°N 075.372804°W	01 Sept 2024
69	G3F12	Monopile	36.931309°N 075.339705°W	02 Sept 2024



70	G3F13	Monopile	36.931352°N 075.324142°W	08 Sept 2024
71	G3C13	Monopile	36.977634°N 075.330046°W	09 Sept 2024
72	G3B12	Monopile	36.993008°N 075.347599°W	11 Sept 2024
73	G3C14	Monopile	36.977677°N 075.314474°W	12 Sept 2024
74	G3E13	Monopile	36.946780°N 075.326106°W	12 Sept 2024
75	G3D12	Monopile	36.962163°N 075.343650°W	13 Sept 2024
76	G3E14	Monopile	36.946821°N 075.310540°W	19 Sept 2024
77	G3D13	Monopile	36.962207°N 075.328081°W	20 Sept 2024
78	G3D14	Monopile	36.993095°N 075.316448°W	23 Sept 2024
1	T2G07	Pin Piles (4)	36.915644°N 075.415527°W	16 October 2024

We remain committed to maintaining communications with fishing communities and other mariners in the area via these periodic updates, informational speaking engagements and dock visits. This information is also posted on the CVOW website.

For additional information or requests for speaking engagements, please contact the following individuals or submit a comment on the CVOW website for response.

- Additional project information is available on the <u>CVOW project website</u>.
- Sign up to receive USCG Local Notice to Mariners Updates: <u>Subscribe to Our RSS Feeds | Navigation Center</u> (uscg.gov)
- GIS Shapefiles of the project site are available here.

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