

Monthly Mariner's Update for Coastal Virginia Offshore Wind	Date of Applicability	01 August 2024
	Issue:	08/24
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The goal of the Monthly Mariner's Update is to give a high-level overview of ongoing and planned near-term 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 here.

- Weekly updates are published in the USCG Local Notice to Mariners which can be found here.
- Previous issues of the Mariner's Update and additional resources can be found <u>here</u>.

Section VII within the USCG LNTM contains information about planned installation sequence and the coordinates of the planned foundations under the heading "VA – SEACOAST – CAPE MAY TO CAPE HATTERS – COASTAL VIRGINIA OFFSHORE WIND ACTIVITIES – SAFETY ZONE". Additionally, Section VIII (Light List Corrections) will highlight the installed foundation locations and their temporary lighting characteristics once they are installed.

Project Background Information

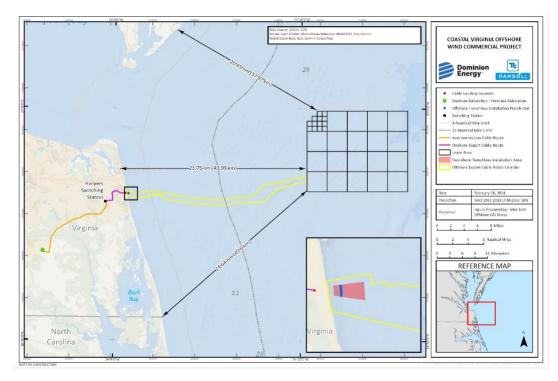
Offshore construction work for Coastal Virginia Offshore Wind (CVOW) commenced in late February 2024 with the first seabed disturbing activity – the relocation of the first Munition of Explosive Concern (MEC).

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.

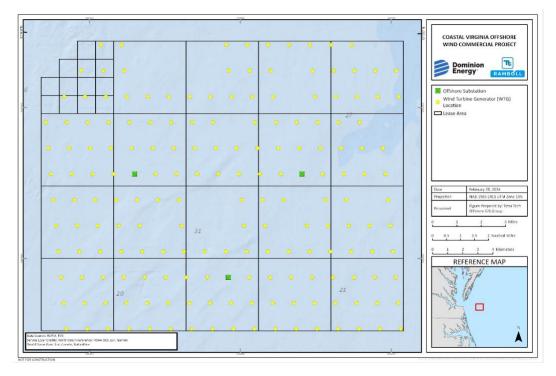
Offshore components of the Project will consist of the following:

- 176 Wind Turbine Generators (WTGs), each with a capacity of 14.7 megawatts, and associated monopile foundations;
- Three Offshore Substations (OSS);
- Approximately 231 miles (372 kilometers) of total length of inter-array cables in the CVOW Lease Area; average inter-array cable length of 5,868 feet (1,789 meters) between WTGs and connected to OSSs; and
- Nine 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, inter-array cables and OECs, will be located in federal waters in the OCS-A 0483 Lease Area (Lease Area). Portions of the Offshore Export Cables 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 here for download.



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

- **NEW* Pre-Lay Grapnel Runs forecasted to begin in the cable corridor mid-August with the M/V GO SEEKER
- **NEW** CLV LIVINGSTONE arrival at project site with first set of subsea cables
- . Monopile installation activities in the northern area of the CVOW site
- Multiple large project components are scheduled for arrival at Portsmouth Marine Terminal
- Ongoing fisheries resource studies in and around the Lease Area
- Virginia Institute of Marine Science, on behalf of Dominion Energy, has published the "Surfclam resource monitoring at the CVOW development site" final report

Special Note:

Please continue to avoid locations where project buoys may be deployed in the lease area. These buoys play a vital role in the CVOW compliance and environmental protection process and can be easily damaged by vessel strikes. Details on locations can be found in the latest USCG Local Notice to Mariners and at the bottom of the Offshore Installation Activities section.

CVOW Marine Coordination Center

The CVOW project established a shoreside Marine Coordination Center (MCC) to monitor and coordinate all offshore activity 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 Information	757-366-7000 (desk)			
	757-731-8307 (cell)			
	Email: <u>CVOWOps@dominionenergy.com</u>			

Offshore Installation Activities

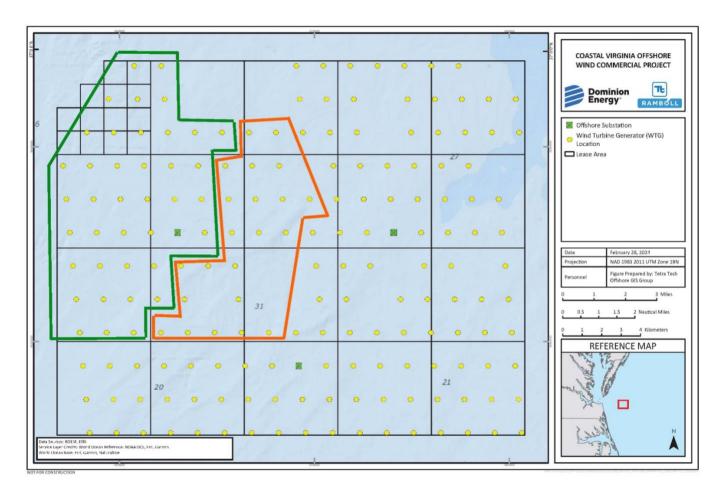
M/V ORION will continue installation of monopiles in the lease area. Supporting the monopile installation will be the M/V ATLANTIC OCEANTIC, providing double big bubble curtain (DBBC) support, M/V GO PATRIOT, the dedicated Protected Species Observation vessel, and M/V GO FREEDOM supporting the buoy installations near the installation sites.

NEW M/V HOS RUGER has been mobilized to support installation activities as a second DBBC vessel.

Weekly updates to the locations of installed monopiles are published in the USCG Local Notice to Mariners.



Below is a depiction of the forecasted installation sequence. The area marked in green indicates the general area of completed monopile installations. The area outlined in orange indicates the focus over the next 4 weeks. Monopile installation will follow a general clockwise pattern around the lease area. Specific installation locations are published weekly in the USCG Local Notice to Mariners.





Marine Lighting on Monopile Foundations

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

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



Rock Placement Around Foundations

Scour installation activities are ongoing with the installation of the "Filter" layer composed of finer rock material around each seabed penetration point of the monopile. This will be followed eventually by installation of the "Armor" layer composed of larger rocks. The M/V FLINTSTONE is currently conducting this installation, which will continue over the following 18 months.

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 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

Acoustic measurement and meteorological buoys are deployed in the lease area for the duration of construction. The buoys will be deployed from the M/V GO FREEDOM and will be migrating throughout the lease area and export corridor during construction. Reference previous Mariner Updates for more details on locations and timelines.

Buoy Name	Type	Latitude (DMS)	Longitude (DMS)	Estimated Dates of Deployment	
	Туре	Latitude (Dillo)	Longitude (Dilio)	From	То
WR1	Wave Monitoring Buoy	36° 56′ 19.27″ N	075° 26' 30.67" W	Apr-24	1-Jul-24
WR2	Wave Monitoring Buoy	36° 53' 05.43" N	075° 23' 45.61" W	Apr-24	1-Nov-24
WR3	Wave Monitoring Buoy	36° 58′ 11.97″ N	075° 17' 53.11" W	1-Jul-24	1-Nov-24
WR4	Wave Monitoring Buoy	36° 58′ 11.73″ N	075° 13' 34.54" W	1-Nov-24	1-Jul-25
WR5	Wave Monitoring Buoy	36° 49' 47.59" N	075° 27' 35.06" W	1-Nov-24	30-Apr-26
WR6	Wave Monitoring Buoy	36° 50′ 45.27″ N	075° 16' 29.88" W	1-Jul-25	31-Dec-25
B1N	Wave Monitoring Buoy	36° 49' 06.77" N	075° 54' 25.59" W	1-Sep-24	31-Aug-25
B1S	Wave Monitoring Buoy	36° 48′ 35.53" N	075° 54' 25.22" W	Back up loc	ation for B1N
B2N	Wave Monitoring Buoy	36° 48′ 19.52″ N	075° 47' 09.59" W	1-Sep-24	31-Aug-25



B2S	Wave Monitoring Buoy	36° 47′ 42.22″ N	075° 47' 08.04" W	Back up loc	ation for B2N
B4S	Wave Monitoring Buoy	36° 47' 49.64" N	075° 39' 46.93" W	1-Sep-24	31-Aug-25
B5S	Wave Monitoring Buoy	36° 49' 37.69" N	075° 33' 56.82" W	1-Sep-24	31-Aug-25
B1-P1	Passive Acoustic Monitoring Buoy	36° 52' 33.5172" N	075° 28' 39.4284"W	May-24	Jun-24
B2-P1	Passive Acoustic Monitoring Buoy	36° 54' 51.57" N	075° 29' 10.23" W	May-24	Jun-24
B3-P1	Passive Acoustic Monitoring Buoy	36° 58' 23.07" N	075° 28' 00.94" W	May-24	Jun-24
B4-P1	Passive Acoustic Monitoring Buoy	36° 59' 35.06" N	075° 23' 43.15" W	May-24	Oct-24
B5-P1	Passive Acoustic Monitoring Buoy	36° 55′ 02.72" N	075° 25' 30.01" W	May-24	Aug-24
B6-P1	Passive Acoustic Monitoring Buoy	36° 51' 52.58" N	075° 24' 14.42" W	May-24	Aug-24
B1-P2	Passive Acoustic Monitoring Buoy	36° 52' 08.79" N	075° 20' 10.85" W	Jun-24	Aug-24
B2-P2	Passive Acoustic Monitoring Buoy	36° 57' 23.11" N	075° 19' 50.83" W	Jun-24	Aug-24
B3-P2	Passive Acoustic Monitoring Buoy	36° 59' 52.30" N	075° 17' 05.82" W	Jun-24	Aug-24
B4-P2	Passive Acoustic Monitoring Buoy	36° 58' 15.95" N	075° 15' 17.65" W	Sep-24	Oct-24
B5-P2	Passive Acoustic Monitoring Buoy	36° 55' 15.55" N	075° 15' 57.15" W	Sep-24	Oct-24
B6-P2	Passive Acoustic Monitoring Buoy	36° 51' 36.19" N	075° 18' 43.08" W	Sep-24	Oct-24
OSS B1	Passive Acoustic Monitoring Buoy	36° 55' 07.22" N	075° 25' 23.12" W	Aug-24	Aug-24
OSS B2	Passive Acoustic Monitoring Buoy	36° 55' 17.32" N	075° 16' 55.20" W	Aug-24	Aug-24
OSS B3	Passive Acoustic Monitoring Buoy	36° 50′ 46.23″ N	075° 20' 47.11" W	Aug-24	Aug-24
OSS B4	Passive Acoustic Monitoring Buoy	36° 54' 02.16" N	075° 21' 08.31" W	Aug-24	Aug-24

Seabed Preparation

NEW Initial planned UXO/MEC relocation efforts have been concluded. As the construction phases continue, the potential for further MEC to be discovered remains elevated, and any additional targets identified will continue to be communicated via USCG Broadcast Notice to Mariners and publication in the USCG Local Notice to Mariners. The M/V NORTHSTAR NAVIGATOR is scheduled to depart the project on or around August 1 and the M/V HOS BAYOU will continue to assist the M/V MYSTIQUE with marine debris relocation.



Mid-August is scheduled to mark the beginning of additional seabed preparation activities with the addition of the M/V GO SEEKER, who will be conducting pre-lay grapnel runs (PLGR). PLGR is one of the last seabed preparation activities conducted prior to cable installation, designed to remove any other obstructions that may have been deposited since the surveys or perhaps were not known about previously. Items typically removed during PLGR operations are wires, ropes, abandoned fishing gear, pipes and tubes, and general debris.

Port Operations

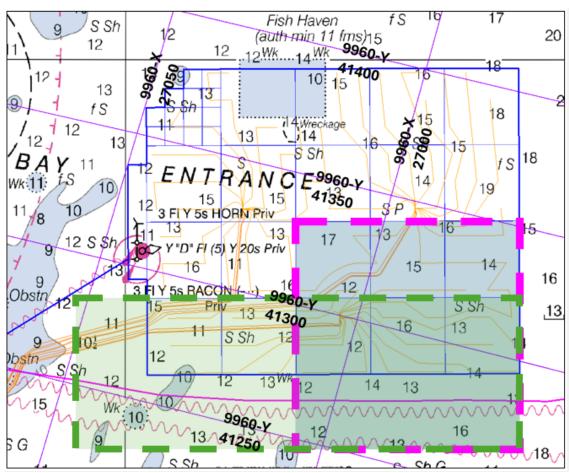
During the month of August, large components such as monopiles and transition pieces will continue to arrive and be staged at Portsmouth Marine Terminal.

Fisheries Resource Characterization Studies

Dominion Energy is 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 chartlets 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 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 18 strings of seven 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 here. This survey was a collaborative effort between VIMS, Rutger's University, VMRC and Dominion Energy.





Recreational Fisheries

- 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 F/V ATLANTIC BOUNTY or F/V CAPT DANNY are the on-site project safety vessels and can provide direction via VHF Marine 16. Alternatively, mariners may reach out directly to the CVOW Marine Coordination Center (757-366-7000)
- Mariners are reminded not to touch or tie off to monopiles and to remain vigilant for other vessels in the area.

Mariners are encouraged to contact Dominion Energy's Fisheries Liaisons with any specific questions about CVOW project activities in relation to both recreational and commercial fisheries. Additional project information is available on the CVOW project website. Sign up to receive USCG Local Notice to Mariners Updates: Subscribe to Our RSS Feeds | Navigation Center (uscg.gov)



Project Vessels

NAME	LENGTH	CALL SIGN	VESSEL NUMBER	MMSI	TYPE AND PURPOSE	
	Installation Vessels					
ORION	705'	ORMB	9825453	2057550000	Offshore Heavy Lift DP3 Installation Vessel: Monopile Installation	
FLINTSTONE	480'	PBZD	9528433	245861000	DP2 Fallpipe Vessel – Scour Protection Installation	
GO FREEDOM	150'	WDK6647	8998100	368076640	Offshore Supply Vessel – Passive Acoustic Monitoring Support Vessel	
GO PATRIOT	150'	WDJ4988	8987852	367783120	Offshore Supply Vessel – Buoy Support Vessel	
ATLANTIC OCEANIC	150'	WAOZ	9285275	366907000	Offshore Supply Vessel – Bubble Curtain Installation Vessel	
HOS RUGER	280'	WDN2728	9385269 1193951	368264720	Offshore Supply Vessel – Bubble Curtain Installation Vessel	
ATLANTIC BOUNTY	81'	WDB8620	N/A	366961860	Fishing Vessel – Project Safety Vessel	
CAPT DANNY	83'	WDL7090	N/A	368157020	Fishing Vessel – Project Safety Vessel	
			Seabed Preparation V	essels		
HOS BAYOU	302'	WDH2368	9647681	367596850	Offshore Supply Vessel: Debris Relocation	
HOS MYSTIQUE	250'	WDE3118	9472323	367334320	Offshore Supply Vessel: Debris Relocation	
GO SEEKER	144	WDN3304	9579157	368270390	Offshore Supply Vessel: Pre-Lay Grapnel Run	
Transportation Vessels						
SUN SHINE	571'	D7DB	9471616	440040000	Heavy Lift Transport Vessel	
SUN RISE	554'	D7GU	9623219	440032000	Heavy Lift Transport Vessel	
MEGA CARAVAN 2	507'	DSMZ7	9586758	441946000	Heavy Lift Transport Vessel	
Fisheries Resource Characterization Vessels						
R/V BAY EAGLE	65'	WBR3978		366749460	Research Vessel	
F/V THOMAS REED	49'			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 may be restricted in their ability to maneuver. It is requested that mariners communicate with project vessels on Channel 16 VHF to coordinate any necessary passing arrangement. Safety vessels will be on scene to assist with the coordination of commercial and public marine traffic and project vessels.

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 further information, please contact the following individuals or submit a comment on the CVOW website for response.

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