

Monthly Mariner’s Update for Coastal Virginia Offshore Wind	Date of Applicability	01 July 2024
	Issue:	07/24
	Revision:	00

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](#).***

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

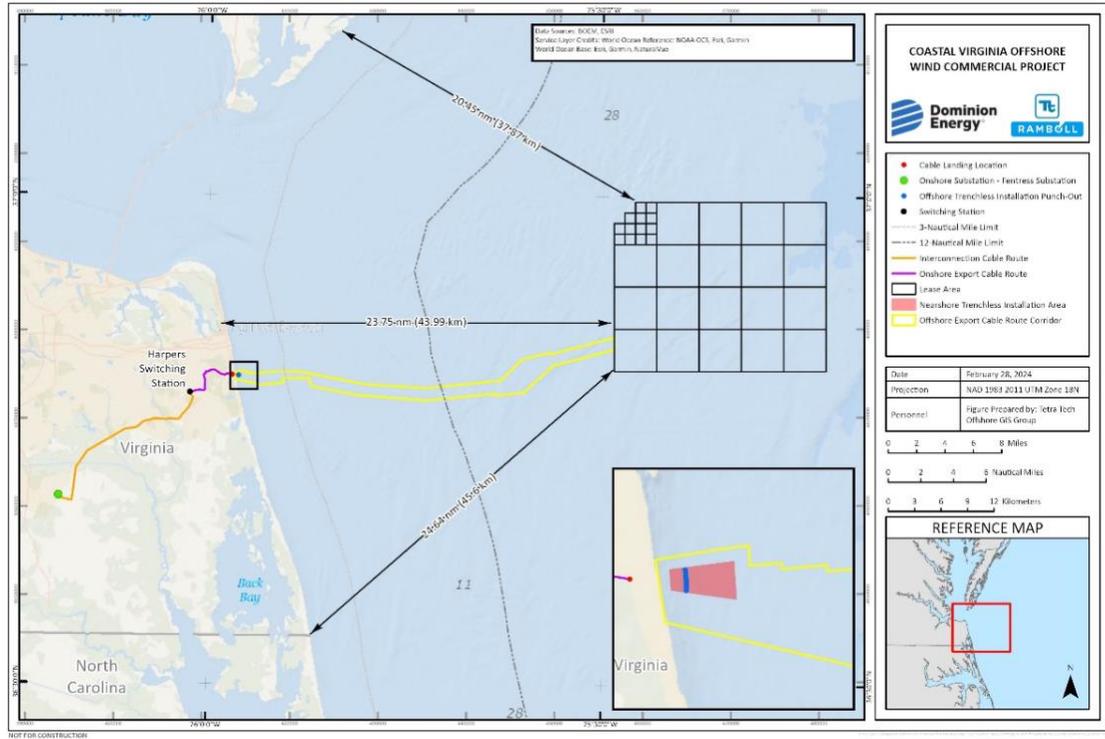
Offshore construction work for Coastal Virginia Offshore Wind (CVOW) commenced in late February 2024 with the first seabed disturbing activity – the relocation of the first Munition of Explosive Concern (MEC).

Dominion Energy will construct, own and operate Coastal Virginia Offshore Wind (CVOW) (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.

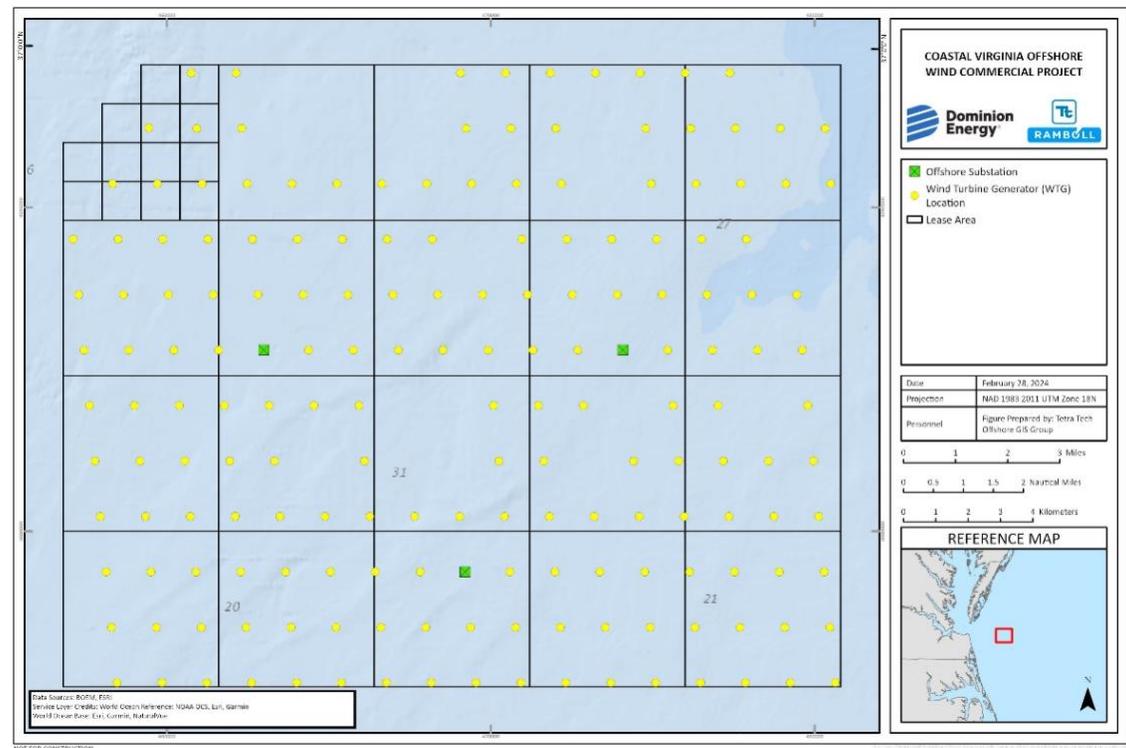
Offshore components of the Project will consist of the following:

- 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 within the CVOW Lease Area; average inter-array cable length of 5,868 feet (1,789 meters) between WTGs and connected to the 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

Work planned for the period of July 1, 2024, to July 30, 2024

- **Monopile installation activities will continue in the north-western area of the CVOW site**
- **Munitions and Explosives of Concern (MEC) activities**
- **Nearshore construction resumes off the coast of the State Military Reservation (SMR)**
- **Multiple large project components are scheduled for arrival at 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 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.

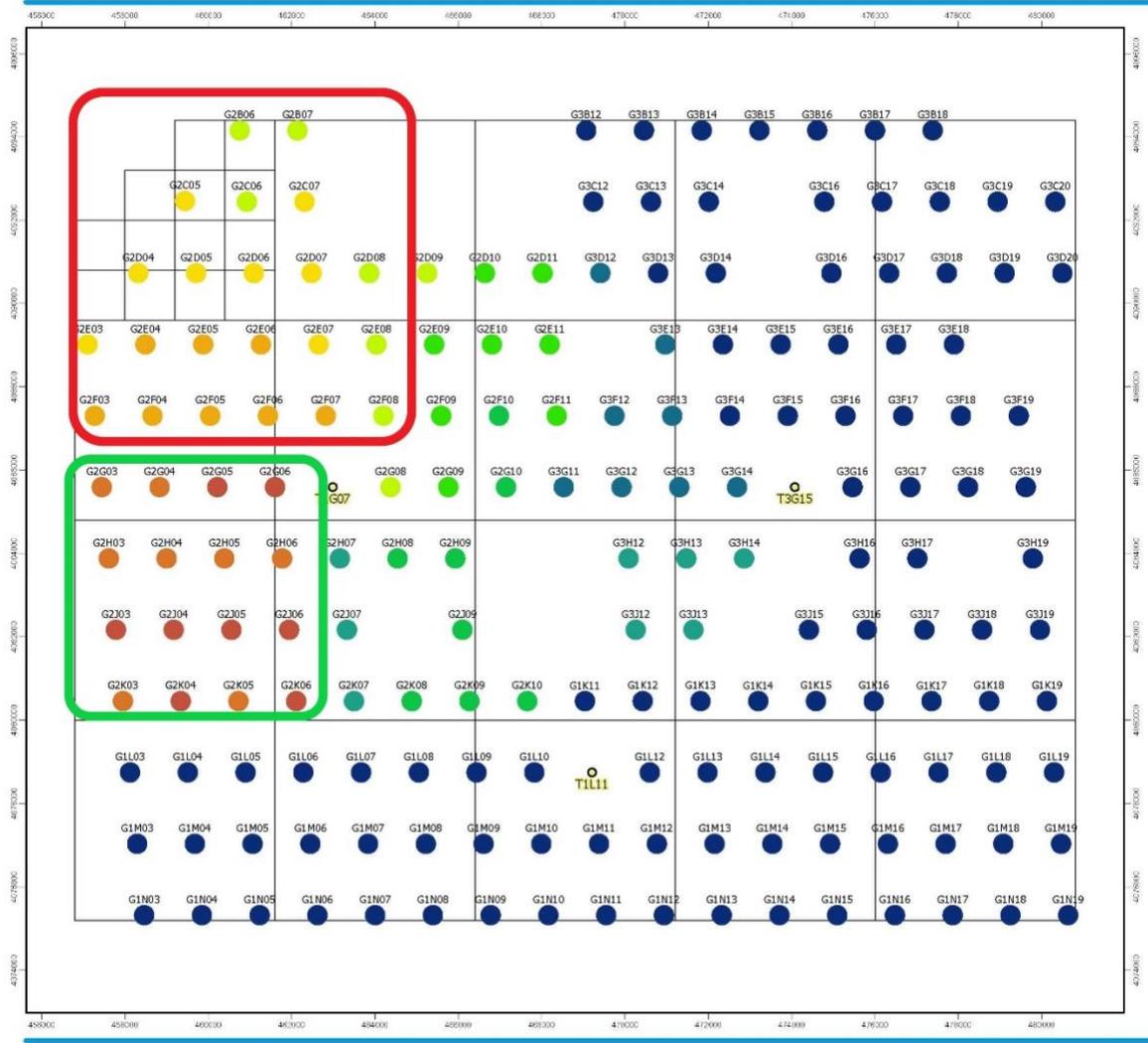
Marine Coordination Center Contact Information	757-366-7000 (desk)
	757-731-8307 (cell)
	Email: CVOWOps@dominionenergy.com

Offshore Installation Activities

M/V ORION completed installation of the first monopile foundation on May 22, 2024. For ongoing installation, the monopile installation vessel M/V ORION will load up to six monopiles at Portsmouth Marine Terminal transit to the offshore site, and install monopile foundations at designated locations. Supporting the monopile installation will be the M/V ATLANTIC OCEANTIC, providing double bubble curtain support, and the M/V GO PATRIOT, the dedicated Protected Species Observation vessel.

Weekly updates to the status of installed monopiles will be 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 red indicates the focus over the next 4-6 weeks. Monopile installation will follow a general clockwise pattern around the lease area. Specific installation locations are published weekly in the USCG LNM.



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 protection installation activities are planned to begin around the monopile foundations in the month of July. Scour erosion over the life of the project can reduce the reliability of the monopile foundations. Scour protection is installed to prevent washout of seabed around the point of seabed entry and to provide protection of the foundation and cabling. A specialized rock placement vessel will be laying rock (scour protection) around the base of the monopiles out to a diameter of approximately 70-90 feet based on specific site conditions. Mariners should be aware that these vessels are limited in their maneuverability when conducting scour installation activities.



Example of fall pipe vessel installing scour protection

Further details such as the start of rock placement will be published in the [USCG Local Notice to Mariners](#) as plans are finalized.

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. The Coast Guard will provide notice of each enforcement period via the Local Notice to Mariners and issue a Broadcast Notice to Mariners via marine channel 16 (VHF-FM) as soon as practicable in response to an emergency or hazardous condition.

Buoy Installations Supporting the Monopile Installation Activities

Scientific measurement buoys will be deployed in the lease area for the duration of construction. The buoys will be deployed from the M/V GO FREEDOM. These devices will be gathering data such as meteorological conditions, acoustic measurements and sound field verifications. These buoys will be migrating throughout the lease area and export corridor during construction, as indicated in the table below.

Buoy Name	Type	Latitude (DMS)	Longitude (DMS)	Estimated Dates of Deployment	
				From	To
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 location 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 location 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



Wave Rider Buoy

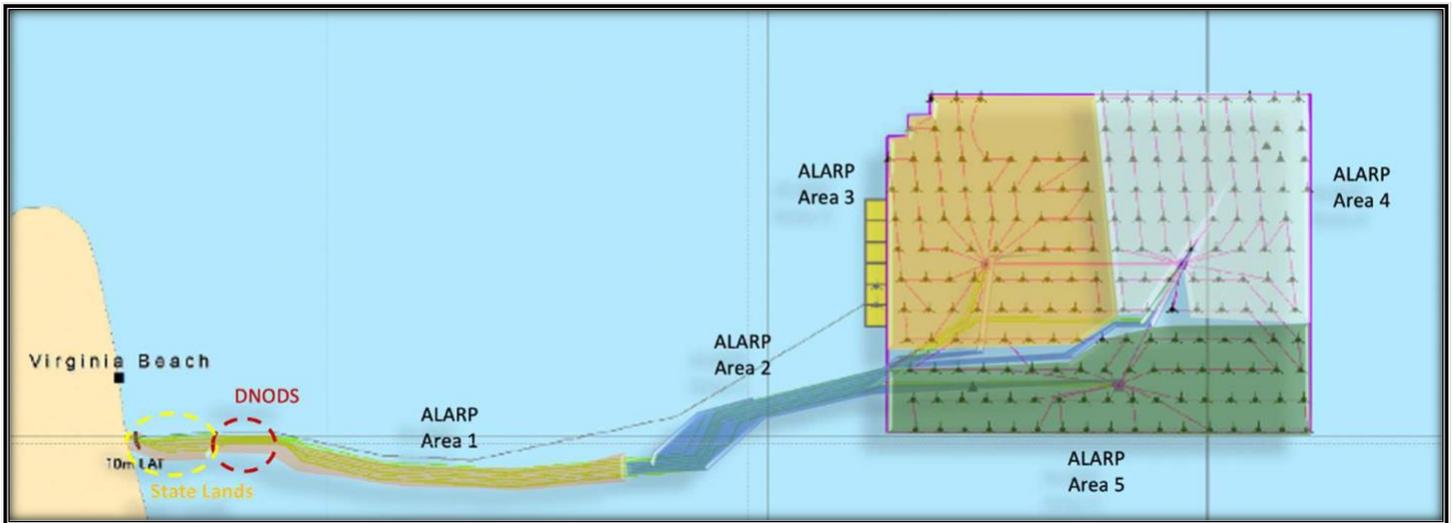
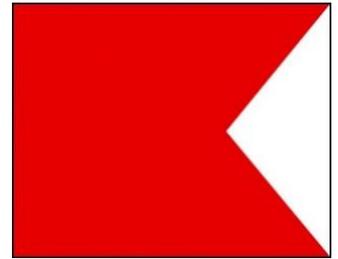


Passive Acoustic Monitoring Buoy

Offshore Export Cable Corridor

Munitions and Explosives of Concern (MEC) relocation activities are ongoing. MEC, also referred to as Unexploded Ordnance (UXO), must be relocated to provide a safe working area within the export cable corridor, as well as monopile foundations and inter-array cables in the Lease Area. The final positions of MEC will be advertised to the public upon completion.

M/V HOS MYSTIQUE and HOS BAYOU will continue MEC relocation activities, as well as debris relocation, in and around the export cable corridor offshore, followed by efforts in the northern section of the Lease Area in Area 3 and 4. ALARP Areas 1 and 2 have completed MEC relocation efforts and are focused on debris relocation. Vessels engaged in MEC operations will fly the international maritime signaling flag bravo:



USCG Safety Zones

The U.S. Coast Guard (USCG) published [Docket Number USCG-2024-0081 to the Federal Register](#) to establish a temporary safety zone for navigable waters within a **1,000-yard radius** of MEC Project Vessels. Operations are planned to relocate MEC in the Atlantic Ocean, within 12 miles of the shores of the State Military Reservation in Virginia Beach, Virginia. The safety zone is needed to protect personnel, vessels and other mariners from potential hazards created by these operations. Entry of vessels or persons into this zone is prohibited unless specifically authorized by the Captain of the Port, Sector Virginia or a designated representative (Master of the vessel conducting MEC operations).

The USCG will issue a Broadcast Notice to Mariners via VHF-FM marine channel 16 when the zone is being enforced. For vessels requesting to enter the Safety Zone, coordinate with Project vessels on VHF Ch 16 prior to entry or with USCG.

Operations will also be conducted outside the 12 nautical mile boundary, both within the export cable corridor and the Lease Area (ALARP Area 2). There will not be an established USCG safety zone surrounding these MEC operations; however, vessels are requested to maintain a 1,000-yard exclusionary zone surrounding project vessels flying the bravo signaling flag conducting relocation activities.

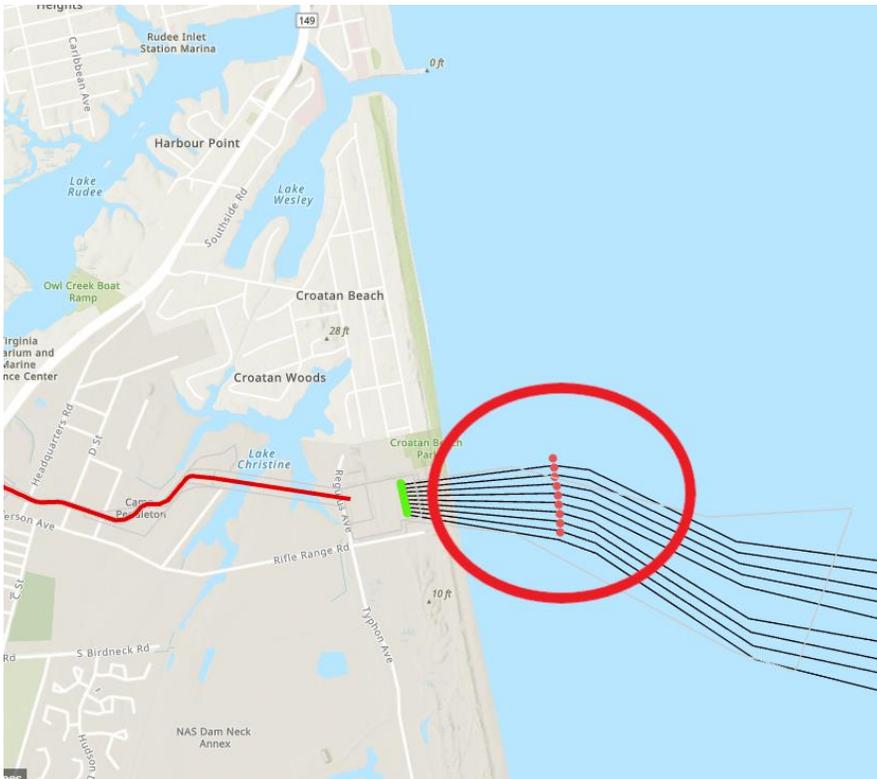
Marine Debris Relocation

The **M/V NORTHSTAR NAVIGATOR** will be conducting light debris relocation work throughout the offshore export cable corridor. This activity will be conducted during the scope of MEC activities. The use of remote-operated vehicles (ROVs) and the associated cabling necessitates an exclusion area around the operation. The vessel is requesting an exclusion zone of $\sim\frac{1}{4}$ -mile (500m) surrounding the vessel operations; mariners are encouraged to contact the vessel on VHF Ch 16 to establish any passing arrangements necessary.

Nearshore Activities

Direct Pipe Punchout Construction

Project contractors began construction activities onshore at and offshore of the State Military Reservation (SMR) in Virginia Beach, VA, in late February. These construction activities support the offshore export cable landing sites within the SMR property, which will run via underground conduit (using Direct Pipe methodology and micro tunnel boring machines) from transition joint bays (TJBs) more than 325 feet (~ 100 m) shoreside of the beach to predetermined positions approximately 1,310 feet (~ 400 m) offshore. **The first phase of Direct Pipe installation was completed in March 2024, and following a scheduled break in activity, resumed in mid-June.** Installations for Direct Pipe conduit installations are planned to continue through July with a scheduled completion in August 2024. Installations of the TJBs will begin in May 2024 and will continue throughout the remainder of 2024 and into early 2025.



The red area indicates the USCG Safety Zone in effect during the nearshore construction efforts when construction vessels are present. Mariners are requested to provide a 500-yard stand-off distance from these activities.

The 36" HDPE conduit being installed will be fabricated onshore and launched from Fairwinds Landing (Lambert's Point) in Norfolk, Virginia. *The conduit will be towed in 1800' lengths* approximately 30 NM to the offshore worksite. The towing fleet will consist of one leading tug, one tailing tug, and assistance/guard vessel(s) as necessary. The HDPE conduit in tow will be equipped with solid white lights to facilitate visibility of the conduit during transit.

The towing evolutions will utilize the auxiliary channel of the Thimble Shoals Channel, to avoid any impact to deep draft vessel traffic. Mariners are advised to exercise extreme caution when operating in the vicinity of the tow, as the vessels involved may have limited maneuverability. USCG Broadcast Notice to Mariners will be transmitted prior to towing operations.

Forecasted Dates of HDPE Conduit Tows
July 12
July 19
July 25

Current Planned Marine Vessel Spread for Nearshore Construction:			
Vessel	Type	Support Activity	Homeport
RAM XII	Lift Boat	Dive Support	Norfolk, VA
GO Glory	OSV	Supplies Transport	Fourchon, LA
Josephine K. Miller	OSV	Excavation	Staten Island, NY
Angeline	Tug	HDPE Tow	Norfolk, VA
Robert T	Tug	HDPE Tow	Norfolk, VA
Katan	Tug	HDPE Tow	Norfolk, VA

Port Operations

During the month of July, there are several scheduled arrivals of components to Portsmouth Marine Terminal.

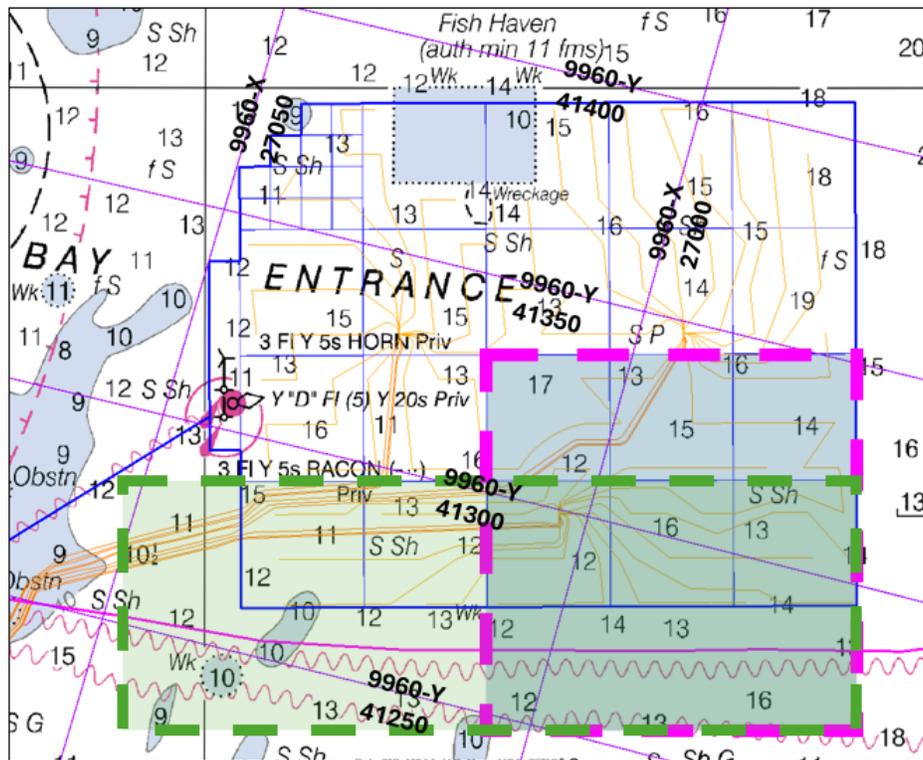


Component Arrivals	Transportation Vessel
9 Transition Pieces 4 Monopiles	M/V SUN SHINE
6 Monopiles	M/V MEGA CARAVAN 2
8 Monopiles	M/V SUNRISE

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.



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 is the on-site project safety vessel 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 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

Installation Site Vessels



Vessel Name	ORION
Length	705'
Call Sign	ORMB
IMO Number	9825453
MMSI	2057550000
Vessel Type	Offshore Heavy Lift DP3 Installation Vessel



Vessel Name	FLINTSTONE
Length	480'
Call Sign	PBZD
IMO Number	9528433
MMSI	245861000
Vessel Type	DP2 Fallpipe Vessel – Scour Protection Installation



Vessel Name	GO FREEDOM
Length	150'
Call Sign	WDK6647
IMO Number	8998100
MMSI	368076640
Vessel Type	Offshore Supply Vessel – Passive Acoustic Monitoring Support Vessel



Vessel Name	GO PATRIOT
Length	150'
Call Sign	WDJ4988
IMO Number	8987852
MMSI	367783120
Vessel Type	Offshore Supply Vessel – Buoy Support Vessel



Vessel Name	ATLANTIC OCEANIC
Length	150'
Call Sign	WAOZ
IMO Number	9285275
MMSI	366907000
Vessel Type	Offshore Supply Vessel – Bubble Curtain Installation Vessel



Vessel Name	ATLANTIC BOUNTY
Length	81'
Call Sign	WDB8620
MMSI	366961860
Vessel Type	Fishing Vessel – Project Safety Vessel

UXO/MEC Identification and Relocation Vessels



Vessel Name	HOS BAYOU
Length	302'
Call Sign	WDH2368
IMO Number	9647681
MMSI	367596850
Vessel Type	Offshore Supply Vessel



Vessel Name	HOS MYSTIQUE
Length	250'
Call Sign	WDE3118
IMO Number	9472323
MMSI	367334320
Vessel Type	Offshore Supply Vessel



Vessel Name	Unnammed RHIB
Length	21'
Call Sign	NA
IMO Number	NA
MMSI	NA
Vessel Type	Rigid-Hull Inflatable



Vessel Name	NORTHSTAR NAVIGATOR
Length	265'
Call Sign	WDG3786
IMO Number	9407809
MMSI	366766000
Vessel Type	Offshore Supply Vessel

Nearshore Installation Vessels


Vessel Name	RAM XII
Call Sign	WDA6919
IMO Number	8764975
MMSI	366837540
Vessel Type	Lift Boat



Vessel Name	JOSEPHINE K. MILLER
Call Sign	WDF9573
IMO Number	9568835
MMSI	367506560
Vessel Type	Towing Vessel



Vessel Name	OSV GO GLORY
Call Sign	WDN3240
IMO Number	8998112
MMSI	368269780
Vessel Type	Offshore Supply Vessel

Transportation Vessels


Vessel Name	SUN SHINE
Length	571'
Call Sign	D7DB
IMO Number	9471616
MMSI	440040000
Vessel Type	Heavy Lift Transport Vessel



Vessel Name	SUN RISE
Length	554'
Call Sign	D7GU
IMO Number	9623219
MMSI	440032000
Vessel Type	Heavy Lift Transport Vessel



Vessel Name	MEGA CARAVAN 2
Length	507'
Call Sign	DSMZ7
IMO Number	9586758
MMSI	441946000
Vessel Type	Heavy Lift Transport Vessel

Fisheries Resource Characterization Survey Vessels


Vessel Name	R/V BAY EAGLE
Length	65'
Call Sign	WBR3978
MMSI	366749460
Vessel Type	Research Vessel



Vessel Name	F/V THOMAS REED
Length	49'
MMSI	367187470
Vessel Type	Commercaill Fishing Vessel



Vessel Name	F/V LADY ISLA
Length	47'
MMSI	338495354
Vessel Type	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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