

VINEYARD MID-ATLANTIC

CONSTRUCTION AND OPERATIONS PLAN VOLUME I APPENDIX

JANUARY 2025

PREPARED BY:

Epsilon
ASSOCIATES INC.

SUBMITTED BY:

VINEYARD MID-ATLANTIC LLC

VINEYARD
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PUBLIC VERSION

Vineyard Mid-Atlantic COP

Appendix I-A Offshore Facilities Location Information

Prepared by:
Epsilon Associates

Prepared for:
Vineyard Mid-Atlantic LLC



January 2025

Vineyard Mid-Atlantic COP

Appendix I-A1 Wind Turbine Generator and Electrical Service Platform Coordinates and Water Depths

Prepared by:
Epsilon Associates

Prepared for:
Vineyard Mid-Atlantic LLC



January 2025

Revision	Date	Description
0	January 2024	Initial submission.
0	January 2025	Resubmitted without revisions.

Appendix I-A1 Wind Turbine Generator and Electrical Service Platform Coordinates and Water Depths

Coordinates and water depths for Vineyard Mid-Atlantic’s wind turbine generator (WTG) and electrical service platform (ESP) positions are provided in the table below. All WTG/ESP positions are within Lease Area OCS-A 0544. Six WTG/ESP positions along the northwestern boundary of Lease Area OCS-A 0544 are contingent upon the final layout of the neighboring Empire Wind 2 project; Vineyard Mid-Atlantic will not develop these “contingent WTG/ESP positions” if the final Empire Wind 2 layout includes WTGs at immediately adjacent positions within Lease Area OCS-A 0512 (see Section 2.3 of Construction and Operations Plan [COP] Volume I).

Table 1 WTG/ESP Coordinates and Water Depths

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
A01	WTG/ESP	672168	4464730	40.315362	-72.973751	42.2
A02	WTG/ESP	670947	4465018	40.318201	-72.988033	42.8
A03	WTG/ESP	669726	4465153	40.319670	-73.002356	40.2
B01	WTG/ESP	672168	4463476	40.304070	-72.974089	41.9
B02	WTG/ESP	670947	4463764	40.306909	-72.988368	41.7
B03	WTG/ESP	669726	4464051	40.309746	-73.002649	44.8
C01	WTG/ESP	672168	4462222	40.292778	-72.974426	44.5
C02	WTG/ESP	670947	4462510	40.295617	-72.988703	42.8
C03	WTG/ESP	669726	4462797	40.298454	-73.002981	40.1
C04	WTG/ESP	668505	4463084	40.301289	-73.017261	40.3
C05	WTG/ESP	667285	4463372	40.304122	-73.031542	43.4
C06	WTG/ESP	666064	4463659	40.306954	-73.045824	42.6
D01	WTG/ESP	672168	4460968	40.281487	-72.974763	43.9
D02	WTG/ESP	670947	4461255	40.284325	-72.989038	44.2
D03	WTG/ESP	669726	4461543	40.287162	-73.003314	42.9
D04	WTG/ESP	668505	4461830	40.289997	-73.017591	42.1
D05	WTG/ESP	667285	4462118	40.292830	-73.031870	40.1
D06	WTG/ESP	666064	4462405	40.295662	-73.046149	40.8
D07	WTG/ESP	664843	4462693	40.298492	-73.060430	41.5
E01	WTG/ESP	672168	4459714	40.270195	-72.975100	43.4
E02	WTG/ESP	670947	4460001	40.273033	-72.989373	43.6
E03	WTG/ESP	669726	4460289	40.275870	-73.003646	43.3
E04	WTG/ESP	668505	4460576	40.278705	-73.017921	42.4
E05	WTG/ESP	667285	4460864	40.281538	-73.032197	43.0
E06	WTG/ESP	666064	4461151	40.284370	-73.046475	42.7
E07	WTG/ESP	664843	4461439	40.287199	-73.060753	41.0

Table 1 WTG/ESP Coordinates and Water Depths (Continued)

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
E08	WTG/ESP	663622	4461726	40.290027	-73.075033	41.2
F02	WTG/ESP	670947	4458747	40.261741	-72.989707	43.4
F03	WTG/ESP	669726	4459035	40.264578	-73.003978	43.1
F04	WTG/ESP	668505	4459322	40.267413	-73.018251	42.4
F05	WTG/ESP	667285	4459610	40.270246	-73.032525	42.2
F06	WTG/ESP	666064	4459897	40.273077	-73.046800	42.4
F07	WTG/ESP	664843	4460184	40.275907	-73.061076	42.0
F08	WTG/ESP	663622	4460472	40.278735	-73.075353	41.6
F09	WTG/ESP	662402	4460759	40.281561	-73.089632	40.4
G03	WTG/ESP	669726	4457781	40.253286	-73.004310	42.5
G04	WTG/ESP	668505	4458068	40.256121	-73.018580	42.2
G05	WTG/ESP	667285	4458355	40.258954	-73.032852	43.0
G06	WTG/ESP	666064	4458643	40.261785	-73.047125	42.3
G07	WTG/ESP	664843	4458930	40.264615	-73.061398	41.4
G08	WTG/ESP	663622	4459218	40.267442	-73.075674	41.5
G09	WTG/ESP	662402	4459505	40.270268	-73.089950	41.0
G10	Contingent WTG/ESP	661181	4459793	40.273093	-73.104228	40.5
H04	WTG/ESP	668505	4456814	40.244828	-73.018910	43.2
H05	WTG/ESP	667285	4457101	40.247661	-73.033179	43.5
H06	WTG/ESP	666064	4457389	40.250493	-73.047449	42.5
H07	WTG/ESP	664843	4457676	40.253322	-73.061721	43.6
H08	WTG/ESP	663622	4457964	40.256150	-73.075994	42.3
H09	WTG/ESP	662402	4458251	40.258976	-73.090268	41.2
H10	WTG/ESP	661181	4458539	40.261800	-73.104543	40.7
H11	Contingent WTG/ESP	659960	4458826	40.264623	-73.118820	40.2
I04	WTG/ESP	668505	4455658	40.234421	-73.019213	44.0
I05	WTG/ESP	667285	4455847	40.236369	-73.033506	43.6
I06	WTG/ESP	666064	4456135	40.239200	-73.047774	43.8
I07	WTG/ESP	664843	4456422	40.242030	-73.062043	43.4
I08	WTG/ESP	663622	4456709	40.244857	-73.076314	42.8
I09	WTG/ESP	662402	4456997	40.247683	-73.090585	42.7
I10	WTG/ESP	661181	4457284	40.250507	-73.104858	42.2
I11	WTG/ESP	659960	4457572	40.253330	-73.119132	41.5
I12	Contingent WTG/ESP	658739	4457859	40.256150	-73.133408	40.2
J05	WTG/ESP	667285	4454593	40.225077	-73.033833	44.3

Table 1 WTG/ESP Coordinates and Water Depths (Continued)

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
J06	WTG/ESP	666064	4454880	40.227908	-73.048098	45.4
J07	WTG/ESP	664843	4455168	40.230737	-73.062365	44.1
J08	WTG/ESP	663622	4455455	40.233565	-73.076633	42.9
J09	WTG/ESP	662402	4455743	40.236391	-73.090903	42.5
J10	WTG/ESP	661181	4456030	40.239215	-73.105173	41.9
J11	WTG/ESP	659960	4456318	40.242037	-73.119445	41.7
J12	WTG/ESP	658739	4456605	40.244858	-73.133718	41.4
K06	WTG/ESP	666064	4453626	40.216615	-73.048422	43.9
K07	WTG/ESP	664843	4453914	40.219445	-73.062687	43.6
K08	WTG/ESP	663622	4454201	40.222272	-73.076953	43.7
K09	WTG/ESP	662402	4454489	40.225098	-73.091220	43.3
K10	WTG/ESP	661181	4454776	40.227922	-73.105488	43.7
K11	WTG/ESP	659960	4455064	40.230744	-73.119758	42.9
K12	WTG/ESP	658739	4455351	40.233565	-73.134028	42.4
K13	WTG/ESP	657519	4455638	40.236383	-73.148301	42.2
K14	WTG/ESP	656298	4455926	40.239200	-73.162574	41.3
L07	WTG/ESP	664843	4452660	40.208152	-73.063009	43.4
L08	WTG/ESP	663622	4452947	40.210979	-73.077272	43.4
L09	WTG/ESP	662402	4453235	40.213805	-73.091537	42.9
L10	WTG/ESP	661181	4453522	40.216629	-73.105803	42.8
L11	WTG/ESP	659960	4453809	40.219451	-73.120070	42.5
L12	WTG/ESP	658739	4454097	40.222272	-73.134338	41.8
L13	WTG/ESP	657519	4454384	40.225090	-73.148608	41.4
L14	WTG/ESP	656298	4454672	40.227907	-73.162879	40.9
M08	WTG/ESP	663622	4451693	40.199687	-73.077591	43.5
M09	WTG/ESP	662402	4451980	40.202512	-73.091854	42.8
M10	WTG/ESP	661181	4452268	40.205336	-73.106117	42.6
M11	WTG/ESP	659960	4452555	40.208158	-73.120382	42.2
M12	WTG/ESP	658739	4452843	40.210979	-73.134648	42.6
M13	WTG/ESP	657519	4453130	40.213797	-73.148916	42.0
M14	WTG/ESP	656298	4453418	40.216614	-73.163184	41.6
M15	Contingent WTG/ESP	655077	4453705	40.219429	-73.177454	41.2
N09	WTG/ESP	662402	4450726	40.191220	-73.092170	43.2
N10	WTG/ESP	661181	4451014	40.194043	-73.106432	42.7
N11	WTG/ESP	659960	4451301	40.196865	-73.120694	42.4
N12	WTG/ESP	658739	4451589	40.199686	-73.134958	42.0
N13	WTG/ESP	657519	4451876	40.202504	-73.149223	42.0

Table 1 WTG/ESP Coordinates and Water Depths (Continued)

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
N14	WTG/ESP	656298	4452164	40.205321	-73.163489	41.9
N15	WTG/ESP	655077	4452451	40.208136	-73.177757	41.3
N16	Contingent WTG/ESP	653857	4452738	40.210949	-73.192026	41.0
O10	WTG/ESP	661181	4449760	40.182751	-73.106746	44.3
O11	WTG/ESP	659960	4450047	40.185572	-73.121006	43.4
O12	WTG/ESP	658739	4450335	40.188393	-73.135267	42.5
O13	WTG/ESP	657519	4450622	40.191211	-73.149530	42.2
O14	WTG/ESP	656298	4450909	40.194028	-73.163794	41.3
O15	WTG/ESP	655077	4451197	40.196843	-73.178059	41.1
O16	WTG/ESP	653857	4451484	40.199656	-73.192326	40.5
O17	Contingent WTG/ESP	652636	4451772	40.202468	-73.206593	40.7
P10	WTG/ESP	661181	4448506	40.171458	-73.107060	44.4
P11	WTG/ESP	659960	4448793	40.174279	-73.121317	44.9
P12	WTG/ESP	658739	4449080	40.177100	-73.135577	44.3
P13	WTG/ESP	657519	4449368	40.179918	-73.149837	45.3
P14	WTG/ESP	656298	4449655	40.182735	-73.164099	43.2
P15	WTG/ESP	655077	4449943	40.185549	-73.178361	42.9
Q12	WTG/ESP	658739	4447826	40.165806	-73.135886	42.5
Q13	WTG/ESP	657519	4448114	40.168625	-73.150144	42.6
Q14	WTG/ESP	656298	4448451	40.171894	-73.164391	43.5

Notes:

1. The final alphanumeric identification scheme will be determined in consultation with the United States Coast Guard (USCG).
2. Easting and northing are referenced to North American Datum (NAD) 1983 (2011) Universal Transverse Mercator (UTM) Zone 18 north in meters. Latitude and longitude are referenced to NAD 1983 (2011) in decimal degrees.
3. Lease Area bathymetry is derived from a digital terrain model (DTM) of multibeam echosounder (MBES) survey data. Depth measurements are listed in meters relative to Mean Lower Low Water (MLLW).

Vineyard Mid-Atlantic COP

Appendix I-A2 Vineyard Mid-Atlantic Easements Request

Prepared by:
Epsilon Associates

Prepared for:
Vineyard Mid-Atlantic LLC



January 2025

Revision	Date	Description
0	January 2024	Initial submission.
1	January 2025	Updated to incorporate revisions to the Project Design Envelope.

Appendix I-A2 Vineyard Mid-Atlantic Easement Request

Pursuant to 30 CFR §§ 585.200, .620(a), and .622(b), Vineyard Mid-Atlantic LLC (the “Proponent”) is preliminarily requesting from the Bureau of Ocean Energy Management (BOEM) a project easement for its offshore export cables that corresponds to the federal portion of the Offshore Export Cable Corridor (OECC) described in Section 3.5 of Construction and Operations Plan (COP) Volume I. The requested project easement is described below.

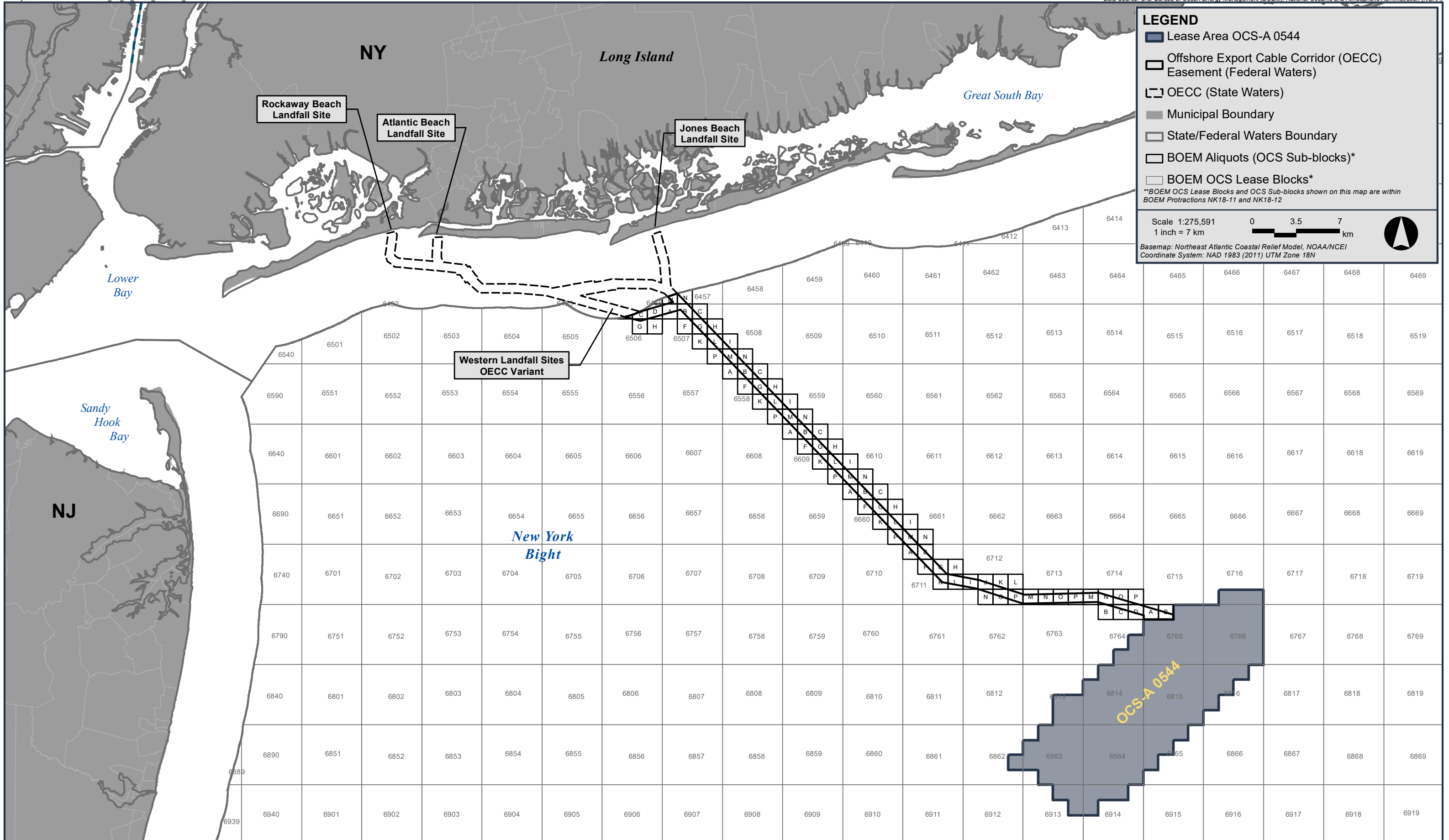
OECC Easement Description

As described in Section 3.5.2 of COP Volume I, the OECC extends from the northern end of Lease Area OCS-A 0544 (the “Lease Area”), continues west along the boundary of neighboring Lease Area OCS-A 0512, and then proceeds northwest across the Ambrose to Nantucket and Nantucket to Ambrose Traffic Lanes towards the southern shore of Long Island, New York. As the OECC approaches shore, it splits into three variations to connect to three potential landfall sites (of which, up to two will be used): the Rockaway Beach Landfall Site, the Atlantic Beach Landfall Site, and the Jones Beach Landfall Site. The Proponent has also identified a “Western Landfall Sites OECC Variant” that may be used for routing offshore export cables to the Rockaway Beach, Atlantic Beach, and Long Beach Landfall Sites. Depending on the landfall site, the length of the OECC from the Lease Area boundary to the landfall site is approximately 55–76 kilometers (km) (34–47 statute miles [mi]).¹

The OECC (including its variant) is typically 720 meters (m) (2,362 feet [ft]) wide. Where the OECC approaches the Lease Area boundary, it widens to approximately 1,030 m (3,380 ft) to allow the final cable alignments to be optimized based on the final electrical service platform (ESP) location(s). The OECC also expands to 1,000 m (3,281 ft) at certain expected cable crossings to allow the cables to cross existing cables perpendicularly and to provide flexibility for the installation process, which is more complex at cable crossings. At this time, the Proponent is requesting an easement for the full width of the OECC but expects to further refine the width of the requested easement prior to BOEM’s Record of Decision.

Figure 1 shows the entire OECC described in the COP. The requested project easement consists of the portion of the OECC in federal waters (bounded by solid lines). The remainder of the OECC passes through New York State waters (bounded by dotted lines). Figure 1 also depicts the BOEM Outer Continental Shelf (OCS) Lease Blocks and Aliquots that are intersected by the OECC. For the primary OECC (without the Western Landfall Sites OECC Variant), the requested project easement (the portion of the OECC in federal waters) is

¹ The length of the OECC is measured from the Lease Area boundary to the offshore edge of the corridor at the landfall site.



LEGEND

- Lease Area OCS-A 0544
- Offshore Export Cable Corridor (OECC) Easement (Federal Waters)
- OECC (State Waters)
- Municipal Boundary
- State/Federal Waters Boundary
- BOEM Aliquots (OCS Sub-blocks)*
- BOEM OCS Lease Blocks*

*BOEM OCS Lease Blocks and OCS Sub-blocks shown on this map are within BOEM Protractions NK18-11 and NK18-12

Scale 1:275,591
1 inch = 7 km

0 3.5 7 km

Basemap: Northeast Atlantic Coastal Relief Model, NOAA/NCEI
Coordinate System: NAD 1983 (2011) UTM Zone 18N

Figure 1
OECC Easement

approximately 50 km (31 mi) long. With the Western Landfall Sites OECC Variant, the project easement is approximately 53 km (33 mi) long. The total area of the requested project easement is approximately 38.6 km² (9,542 acres).

The approximate extent of the project easement (in federal waters) can be determined by connecting in sequence the coordinates listed in Table 1 below. The coordinates are provided for the vertices of the polygon that form the requested easement in both geographic North American Datum (NAD) 1983 (2011) (longitude, latitude) and Universal Transverse Mercator (UTM) Zone 18 north, NAD 1983 (2011) (eastings, northings).

Table 1 OECC Easement Coordinates

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
1	665600	4462800	40.299308	-73.051502	Southeastern
2	664400	4462800	40.299545	-73.065614	Southeastern
3	663230	4462800	40.299775	-73.079373	Southeastern
4	663230	4463120	40.302656	-73.079292	Southeastern
5	659552	4464199	40.313079	-73.122276	Southeastern
6	653580	4464064	40.312990	-73.192566	Southeastern
7	649911	4465250	40.324334	-73.235442	Southeastern
8	647138	4465771	40.329519	-73.267946	Southeastern
9	626243	4487543	40.529020	-73.509506	Southeastern
10	623041	4486635	40.521326	-73.547475	Southeastern
11	621834	4486958	40.524414	-73.561663	Northwestern
12	621921	4486980	40.524592	-73.560626	Northwestern
13	622023	4487006	40.524815	-73.559419	Northwestern
14	622124	4487035	40.525057	-73.558218	Northwestern
15	622225	4487065	40.525315	-73.557023	Northwestern
16	622325	4487097	40.525590	-73.555835	Northwestern
17	622425	4487131	40.525883	-73.554654	Northwestern
18	622524	4487167	40.526193	-73.553481	Northwestern
19	622622	4487205	40.526519	-73.552315	Northwestern
20	622719	4487245	40.526862	-73.551157	Northwestern
21	622816	4487286	40.527222	-73.550009	Northwestern
22	622912	4487330	40.527599	-73.548869	Northwestern
23	623007	4487375	40.527992	-73.547739	Northwestern
24	623026	4487385	40.528076	-73.547503	Northwestern
25	623036	4487382	40.528053	-73.547395	Northwestern
26	625679	4488132	40.534405	-73.516049	Northwestern
27	625373	4488450	40.537321	-73.519593	Northwestern

Table 1 OECC Easement Coordinates (Continued)

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
28	625236	4488578	40.538494	-73.521191	Northwestern
29	625236	4488578	40.538494	-73.521191	Northwestern
30	626007	4488830	40.540643	-73.512038	Northwestern
31	626613	4488198	40.534859	-73.505011	Northeastern
32	647498	4466436	40.335444	-73.263559	Northeastern
33	650089	4465949	40.330598	-73.233184	Northeastern
34	653685	4464787	40.319477	-73.191150	Northeastern
35	659648	4464921	40.319565	-73.120973	Northeastern
36	665600	4463175	40.302686	-73.051405	Northeastern