

Construction & Operations Plan

Ocean Wind Offshore Wind Farm

Volume III

May 18, 2023

Submitted to:



Submitted by:



Prepared by:



Ocean Wind Offshore Wind Farm

Construction and Operations Plan VOLUME III

May 2023

Document Version

File Name	Preparer	Editor	Checker	Acceptor	Approver
OCW01_COP_Volume III_Confidential_20230518	PB, MD	AD	SZ, JD	MEGAL	KAPER

CONTAINS CONFIDENTIAL INFORMATION

Certain information included in this Construction and Operations Plan (COP) qualifies as trade secrets and/or commercial or financial information that is privileged and confidential, and which is exempt from public disclosure under the Federal Freedom of Information Act (5 U.S.C. § 552(b) (4)) (as reflected in BOEM's regulations at 30 C.F.R. §§ 585.113 and 585.620). This privileged and confidential information is also exempt from public disclosure under the New Jersey Open Records Act (pursuant to N.J.A.C. 47:1A), New Jersey Administrative Code 7:1D-3, National Historic Preservation Act (16 U.S.C. Part 470w-3) and the Archaeological Resources Protection Act of 1979 (16 U.S.C. Part 4702-3).

Ocean Wind LLC has marked each Appendix in this COP which contains privileged and confidential material with the legend "Contains Confidential Information", and requests that BOEM (and each federal and state agency to which a copy of this COP is provided) withhold these designated materials from public disclosure.

Construction and Operations Plan - Overall Outline

Volume I

Executive Summary

1. Project and Proponent Information Overview
 - 1.1 Ocean Wind LLC
 - 1.2 Introduction
 - 1.3 Commercial Lease Stipulations and Compliance
2. Regulatory Framework and Stakeholder Outreach
 - 2.1 Required Information in COP
 - 2.2 Permits and Authorizations
 - 2.3 Stakeholder Outreach
3. Ocean Wind's Purpose and Need of the Proposed Action
4. Project Description
 - 4.1 Ocean Wind Project Location
 - 4.2 Design Envelope Approach
 - 4.3 Project Infrastructure Overview
 - 4.4 Project Key Parameters
 - 4.5 Schedule
 - 4.6 Phased Development
5. Project Development, Route Planning, and Site Selection
 - 5.1 Project Screening and Siting
 - 5.2 Design Alternatives Reviewed and Not Carried Forward
6. Project Infrastructure and Description of Activities
 - 6.1 Offshore Infrastructure and Activities
 - 6.2 Onshore Infrastructure and Activities
 - 6.3 Decommissioning Plan
7. Health and Safety
 - 7.1 Introduction
 - 7.2 Major Components of the Project SMS
 - 7.3 Cybersecurity
 - 7.4 Obstruction Lighting and Markings
8. Waste Management and Chemicals
 - 8.1 Chemicals
 - 8.2 Waste Management
9. Other Information
 - 9.1 Design Standards
10. References

Volume II

1. Potential Impact Producing Factors, Applicant Proposed Impact Minimization Measures, and Summary of Project Impacts
 - 1.1 Potential Impact Producing Factors and Applicant Proposed Impact Minimization Measures
 - 1.2 Summary of Project Impacts
2. Existing Conditions, Potential Impacts, and Mitigation
 - 2.1 Physical Resources
 - 2.1.1 Geological Resources
 - 2.1.2 Water Quality

- 2.1.3 Air Quality
- 2.2 Biological Resources
 - 2.2.1 Terrestrial and Coastal Habitats
 - 2.2.2 Terrestrial and Coastal Fauna
 - 2.2.3 Birds
 - 2.2.4 Bats
 - 2.2.5 Benthic Resources
 - 2.2.6 Finfish and Essential Fish Habitat
 - 2.2.7 Marine Mammals
 - 2.2.8 Sea Turtles
- 2.3 Socioeconomic Resources
 - 2.3.1 Demographics, Employment, and Economics
 - 2.3.2 Environmental Justice
 - 2.3.3 Recreation and Tourism
 - 2.3.4 Commercial Fisheries and For-Hire Recreational Fishing
 - 2.3.5 Land Use and Coastal Infrastructure
 - 2.3.6 Navigation and Vessel Traffic
 - 2.3.7 Other Marine Uses
- 2.4 Cultural, Historical, and Archaeological Resources
- 3. References Cited

Volume III

- Appendix A Emergency Response Plan, Including Oil Spill Response Plan
(Contains Confidential Information - Not for Public Disclosure)
- Appendix B Safety Management System *(Contains Confidential Information - Not for Public Disclosure)*
 - B-1 Supplemental Waste Management Information
 - B-2 Supplemental Information Provided in Response to BOEM Comments
- Appendix C Certified Verification Agent Services
(Contains Confidential Information - Not for Public Disclosure)
- Appendix D Ocean Wind Offshore Wind Farm (OCW01) Marine Site Investigation Report
(Contains Confidential Information - Not for Public Disclosure)
- Appendix E Biological Survey Results
(Portions Contain Confidential Information - Not for Public Disclosure)
- Appendix F Archaeology and Historic Properties Survey Report
 - F-1 Marine Archaeological Resources Assessment (MARA)
(Contains Confidential Information - Not for Public Disclosure)
 - F-2 Terrestrial Archaeological Resources Assessment (TARA)
(Contains Confidential Information - Not for Public Disclosure)
 - F-3 Assessment of Visual Effects on Onshore Historic Properties
 - F-4 Historic Properties Treatment Plans
 - F-5 Terrestrial Post-Review Discoveries Plan, Marine (Submerged) Post-Review Discoveries Plan
(Contains Confidential Information - Not for Public Disclosure)
- Appendix G Locations for Offshore Turbines and Substations
- Appendix H Assessment of the Potential Effects of the Ocean Wind Offshore Wind Farm on Birds & Bats
- Appendix I Atlantic Sturgeon Supplementary Material
- Appendix J Marine Mammal Supplementary Material
- Appendix K Sea Turtle Supplementary Material
- Appendix L Visual Impact Assessment
- Appendix M Navigation Safety Risk Assessment

Appendix N	Air Quality Analysis <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix O	Fisheries Communication and Outreach Plan
Appendix P	Technical Information to Support the Essential Fish Habitat (EFH) Consultation
Appendix Q	Coastal Zone Consistency Assessment
Appendix R	Noise Supplementary Material R-1 Over-air Noise Supplementary Material R-2 Underwater Noise Supplementary Material
Appendix S	BOEM's Best Management Practices
Appendix T	Departure Request and Supplemental Filing Schedule
Appendix U	Conceptual Plans and Typical Design Drawings <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix V	Environmental Justice Supplementary Material
Appendix W	Metocean Monitoring Information
Appendix X	Munitions and Explosives of Concern (MEC) and Unexploded Ordnance (UXO) Supplemental Information <i>(Contains Confidential Information - Not for Public Disclosure)</i> X-1 Munitions and Explosives of Concern (MEC) and Unexploded Ordnance (UXO) with Risk Assessment and Risk Mitigation Strategy X-2 MEC Pre-Installation Geophysical Survey Specification X-3 Supplementary UXO Information for Orsted Wind Farm Construction, US East Coast
Appendix Y	Site Conditions Assessment <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix Z	Design Feasibility Study <i>(Contains Confidential Information - Not for Public Disclosure)</i> Z-1 Foundation Feasibility Study Z-2 Cable Burial Feasibility Assessment
Appendix AA	Protected Species Mitigation and Monitoring Plan (PSMMP): Sea Turtles and ESA-Listed Fish Species
Appendix AB	Avian and Bat Post-Construction Monitoring Framework
Appendix AC	Wetland and Watercourse Delineation Report
Appendix AD	Airspace and Radar Analysis
Appendix AE	Fisheries Mitigation Efforts

Table of Contents

Volume III

Appendix A	Emergency Response Plan, Including Oil Spill Response Plan <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix B	Safety Management System <i>(Contains Confidential Information - Not for Public Disclosure)</i> B-1 Supplemental Waste Management Information B-2 Supplemental Information Provided in Response to BOEM Comments
Appendix C	Certified Verification Agent Services <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix D	Ocean Wind Offshore Wind Farm (OCW01) Marine Site Investigation Report <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix E	Biological Survey Results <i>(Portions Contain Confidential Information - Not for Public Disclosure)</i>
Appendix F	Archaeology and Historic Properties Survey Report F-1 Marine Archaeological Resources Assessment (MARA) <i>(Contains Confidential Information - Not for Public Disclosure)</i> F-2 Terrestrial Archaeological Resources Assessment (TARA) <i>(Contains Confidential Information - Not for Public Disclosure)</i> F-3 Assessment of Visual Effects on Onshore Historic Properties F-4 Historic Properties Treatment Plans F-5 Terrestrial Post-Review Discoveries Plan, Marine (Submerged) Post-Review Discoveries Plan <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix G	Locations for Offshore Turbines and Substations
Appendix H	Assessment of the Potential Effects of the Ocean Wind Offshore Wind Farm on Birds & Bats
Appendix I	Atlantic Sturgeon Supplementary Material
Appendix J	Marine Mammal Supplementary Material
Appendix K	Sea Turtle Supplementary Material
Appendix L	Visual Impact Assessment
Appendix M	Navigation Safety Risk Assessment
Appendix N	Air Quality Analysis <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix O	Fisheries Communication and Outreach Plan
Appendix P	Technical Information to Support the Essential Fish Habitat (EFH) Consultation
Appendix Q	Coastal Zone Consistency Assessment
Appendix R	Noise Supplementary Material R-1 Over-air Noise Supplementary Material R-2 Underwater Noise Supplementary Material
Appendix S	BOEM's Best Management Practices
Appendix T	Departure Request and Supplemental Filing Schedule
Appendix U	Conceptual Plans and Typical Design Drawings <i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix V	Environmental Justice Supplementary Material
Appendix W	Metocean Monitoring Information
Appendix X	Munitions and Explosives of Concern (MEC) and Unexploded Ordnance (UXO) Supplemental Information <i>(Contains Confidential Information - Not for Public Disclosure)</i> X-1 Munitions and Explosives of Concern (MEC) and Unexploded Ordnance (UXO) with Risk Assessment and Risk Mitigation Strategy X-2 MEC Pre-Installation Geophysical Survey Specification X-3 Supplementary UXO Information for Orsted Wind Farm Construction, US East Coast

Appendix Y	Site Conditions Assessment	<i>(Contains Confidential Information - Not for Public Disclosure)</i>
Appendix Z	Design Feasibility Study	<i>(Contains Confidential Information - Not for Public Disclosure)</i>
	Z-1 Foundation Feasibility Study	
	Z-2 Cable Burial Feasibility Assessment	
Appendix AA	Protected Species Mitigation and Monitoring Plan (PSMMP): Sea Turtles and ESA-Listed Fish Species	
Appendix AB	Avian and Bat Post-Construction Monitoring Framework	
Appendix AC	Wetland and Watercourse Delineation Report	
Appendix AD	Airspace and Radar Analysis	
Appendix AE	Fisheries Mitigation Efforts	