Appendix B. List of Preparers and Reviewers, References Cited, and Glossary

B.1. List of Preparers and Reviewers

Table B-1 Bureau of Ocean Energy Management Contributors

Name	Role/Resource Area
National Environmental Policy Act (NEPA) Coordinator	
Landers, Lisa	Environmental Protection Specialist
Resource Scientists and Contributors	
Ajilore, Ololade (Lola)	Navigation and Vessel Traffic
Baker, Arianna	Navigation and Vessel Traffic
Bigger, David	Birds; Bats; Coastal Habitat and Fauna
Boatman, Mary	Other Uses
Brune, Genevieve	Land Use and Coastal Infrastructure
Bucatari, Jennifer	Other Uses – Marine Minerals
Chaiken, Emma	Demographics, Employment, and Economics; Recreation and Tourism; Commercial Fisheries and For-Hire Recreational Fishing
Cody, Mary	Marine Mammals; Sea Turtles
Conrad, Alexander	Marine Mammals; Sea Turtles
Dobbs, Kerby	Other Uses – Marine Minerals
Draher, Jennifer	Water Quality
Fulling, Gregory	Marine Mammals; Sea Turtles
Heinze, Martin	Demographics, Employment, and Economics
Hesse, Jeffrey T.	Other Uses
Horrell, Christopher	Cultural Resources
Howson, Ursula	Benthic Resources; Coastal Habitat and Fauna; Commercial Fisheries and For-Hire Recreational Fishing; Finfish, Invertebrates, and Essential Fish Habitat; Other Uses; Recreation and Tourism; Wetlands
Jensen, Mark	Demographics, Employment, and Economics
Renick, Hillary	Tribal Liaison
McCarty, John	Visual Resources; Recreation and Tourism
McCoy, Angel	Meteorologist, Technical Design Elements
Miller, Jennifer	Other Uses
Moshier, Marissa	Cultural Resources
Schnitzer, Laura (LK)	Cultural Resources
Shanahan, Amy	Cultural Resources
Slayton, Ian	Air Quality
Stokely, Sarah	Cultural Resources
Waskes, Will	Project Coordinator
Wolf, Jacob	Air Quality

Table B-2 Reviewers

Name	Title	Agency
Brown, William Y.	Chief Environmental Officer	BOEM
Baker, Karen	Chief, Office of Renewable Energy	BOEM
Morin, Michelle	Chief, Environment Branch for Renewable Energy	BOEM
Stromberg, Jessica	Acting Chief, Environment Branch for Renewable Energy	BOEM
Ottman, Noel	Solicitor	DOI
Vorkoper, Stephen	Solicitor	DOI
Heckman, Andrea	Lead Environmental Protection Specialist	BSEE
Sample, Steven	Executive Director, DOD Siting Clearinghouse	DOD
Austin, Mark	Strategic Programs, Environmental Review Team Lead	USEPA Region 2
Nolan, Katie	Team Leader for Renewable Energy & Offshore Wind, Team Leader of Redevelopment & Restoration	NJDEP
McLean, Laura	Ocean and Lakes Policy Analyst	NYSDOS
Krueger, Mary	Energy Specialist	NPS Interior Region 1, North Atlantic - Appalachian
Tuxbury, Susan	Wind Program Coordinator, GARFO Habitat and Ecosystems Division	NMFS
Crocker, Julie	Endangered Fish Branch Chief, GARFO Protected Resources Division	NMFS
Keith Hanson	Marine Habitat Resource Specialist, GARFO Habitat and Ecosystem Services Division	NMFS
Anthony, Brian	Biologist	USACE Philadelphia District
Creelman, Matthew	Marine Transportation Specialist	USCG District 5
Ciappi, Michael	Senior Fish and Wildlife Biologist	USFWS

DOI = Department of the Interior; GARFO = Greater Atlantic Regional Fisheries Office; NPS = National Park Service

Table B-3 Consultants

Name	Company	Role/Resource Area
Baer, Sarah	ICF	Demographics, Employment, and Economics; Environmental Justice
Byram, Saadia	ICF	Editor
Copeland, Tanya	ICF	Project Manager
Diller, Elizabeth	ICF	Project Director
Ernst, David	ICF	Air Quality/Climate
Gleaton, Soniya	ICF	Comment Processing
Johnson, David	ICF	Bats; Birds; Coastal Habitat; Water Quality; Wetlands
Jost, Rebecca	ICF	Other Uses; Recreation and Tourism; Land Use and Coastal Infrastructure
Lentz, Corey	ICF	Cultural Resources and Section 106 Support
Mendoza, Tiffany	ICF	Public Involvement

Name	Company	Role/Resource Area
Munaretto, Claire	ICF	Demographics, Employment, and Economics; Environmental Justice
Paulson, Merlyn	ICF	Scenic and Visual Resources
Read, Brent	ICF	Geographic Information Systems
Schanel, Pam	ICF	Public Involvement
Tavel, January	ICF	Cultural Resources and Section 106 Lead
Valley, Nathalie	ICF	Navigation and Vessel Traffic
Wheaton, Jenna	ICF	Section 106 Support; Comment Processing
Winslow, Anne	ICF	Deputy Project Manager
Latham, Pam	RPI	Benthic Resources; Finfish, Invertebrates, and Essential Fish Habitat
Butwin, Matt	Prospect Hill Consulting	Commercial Fisheries and For-Hire Recreational Fishing
Baigas, Phil	WSP	Sea Turtles
Mathies, Noelle	WSP	Marine Mammals
Zottenberg, Katelyn	WSP	Marine Mammals

QA/QC = quality assurance/quality control; RPI = Research Planning, Inc.

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B.2.3.1. Section 3.1, Impact-Producing Factors

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B.2.3.2. Section 3.2, Mitigation Identified for Analysis in the Environmental Impact Statement

None.

B.2.3.3. Section 3.3, Definition of Impact Levels

None.

B.2.3.4. Section 3.4, Air Quality

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B.3. Glossary

Term	Definition
affected environment	Environment as it exists today that could be potentially affected by the proposed Project
algal blooms	Rapid growth of the population of algae, also known as algae bloom
allision	A moving ship running into a stationary ship
anthropogenic	Generated by human activity
archaeological resource	Historical place, site, building, shipwreck, or other archaeological site on the landscape
below grade	Below ground level
benthic	Related to the bottom of a body of water
benthic resources	The seafloor surface, the substrate itself, and the communities of bottom-dwelling organisms that live within these habitats
Cetacea	Order of aquatic mammals made up of whales, dolphins, porpoises, and related lifeforms
coastal habitat	Coastal areas where flora and fauna live, including salt marshes and aquatic habitats
coastal waters	Waters in nearshore areas where bottom depth is less than 98.4 feet (30 meters)
coastal zone	The lands and waters starting at 3 nm from the land and ending at the first major land transportation route
commercial fisheries	Areas or entities raising and catching fish for commercial profit
commercial-scale wind energy facility	Wind energy facility usually greater than 1 MW that sells the produced electricity
criteria pollutant	One of six common air pollutants for which USEPA sets NAAQS: CO, lead, NO_2, ozone, particulate matter, or SO_2
critical habitat	Geographic area containing features essential to the conservation of threated or endangered species
cultural resource	Historical districts, objects, places, sites, buildings, shipwrecks, and archaeological sites on the American landscape, as well as sites of traditional, religious, or cultural significance to cultural groups, including Native American tribes
culvert	structure, usually a tunnel, allowing water to flow under an obstruction (e.g., road, trail)
cumulative impacts	Impacts that could result from the incremental impact of a specific action, such as the proposed Project, when combined with other past, present, or reasonably foreseeable future actions or other projects; can occur from individually minor, but collectively significant actions that take place over time
demersal	Living close to the ocean floor
design envelope	The range of proposed Project characteristics defined by the applicant and used by BOEM for purposes of environmental review and permitting
dredging	Removal of sediments and debris from the bottom of lakes, rivers, harbors, and other waterbodies
duct bank	Underground structure that houses the onshore export cables, which consists of polyvinyl chloride pipes encased in concrete

Term	Definition
ecosystem	Community of interacting living organisms and nonliving components (such as air, water, soil)
electromagnetic field	A field of force produced by electrically charged objects and containing both electric and magnetic components
embayment	Recessed part of a shoreline
endangered species	A species that is in danger of extinction in all or a significant portion of its range
Endangered Species Act-listed species	Species listed under the ESA of 1973 (as amended)
environmental protection measure	Measure proposed to avoid or minimize potential impacts
ensonification	The process of filling with sound
environmental consequences	The potential direct, indirect, and cumulative impacts that the construction, O&M, and decommissioning of the proposed Project would have on the environment
environmental justice communities	Minority and low-income populations affected by the proposed Project
epifauna	Fauna that lives on the surface of a seabed (or riverbed), or is attached to underwater objects or aquatic plants or animals
essential fish habitat	"Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (50 CFR 600)
export cables	Cables connecting the wind facility to the onshore electrical grid power
export cable corridor	Area identified for routing the entire length of the onshore and offshore export cables
federal aids to navigation	Visual references operated and maintained by USCG, including radar transponders, lights, sound signals, buoys, and lighthouses, that support safe maritime navigation
finfish	Vertebrate and cartilaginous fishery species, not including crustaceans, cephalopods, or other mollusks
for-hire commercial fishing	Commercial fishing on a for-hire vessel (i.e., a vessel on which the passengers make a contribution to a person having an interest in the vessel in exchange for carriage)
for-hire recreational fishing	Fishing from a vessel carrying a passenger for hire who is engaged in recreational fishing
foundation	The bases to which the WTGs and OSS are installed on the seabed. Three types of foundations have been considered and reviewed for the Project: jacket, monopile, or gravity-based structure.
geomagnetic	Relating to the magnetism of the Earth
hard-bottom habitat	Benthic habitats composed of hard-bottom (e.g., cobble, rock, and ledge) substrates
historic property	Prehistoric or historic district, site, building, structure, or object that is eligible for or already listed in the NRHP; also includes any artifacts, records, and remains (surface or subsurface) related to and located within such a resource
historical resource	Prehistoric or historic district, site, building, structure, or object that is eligible for or already listed in the NRHP; also includes any artifacts, records, and remains (surface or subsurface) related to and located within such a resource

Term	Definition
horizontal directional drilling	Trenchless technique for installing underground cables, pipes, and conduits using a surface-launched drilling rig
hull	Watertight frame or body of a ship
infauna	Fauna living in the sediments of the ocean floor (or river or lake beds)
inter-array cables	Cables connecting the wind turbine generators to the electrical service platforms
interconnection facility	Substation connecting the proposed Project to the existing bulk power grid system
inter-link cables	Cables connecting the electrical service platforms to one another
invertebrate	Animal with no backbone
jacket foundation	Latticed steel frame with three or four supporting piles driven into the seabed
jack-up vessel	Mobile and self-elevating platform with buoyant hull
jet excavation	Process of moving or removing soil with a jet
jet plowing	Plowing in which the jet plow, with an adjustable blade, or plow rests on the seafloor and is towed by a surface vessel; the jet plow creates a narrow trench at the designated depth, while water jets fluidize the sediment within the trench; in the case of the proposed Project, the cables would then be feed through the plow and laid into the trench as it moves forward; the fluidized sediments then settle back down into the trench and bury the cable
knot	Unit of speed equaling 1 nm per hour
landfall site	The shoreline landing site at which the offshore cable transitions to onshore
marine mammal	Aquatic vertebrate distinguished by the presence of mammary glands, hair, three middle ear bones, and a neocortex (a region of the brain)
marine waters	Waters in offshore areas where bottom depth is more than 98.4 feet (30 meters)
mechanical cutter	Method of submarine cable installation equipment that involves a cutting wheel or excavation chain to cut a narrow trench into the seabed allowing the cable to sink under its own weight or be pushed to the bottom of the trench via a cable depressor
mechanical plow	Method of submarine cable installation equipment that involves pulling a plow along the cable route to lay and bury the cable. The plow's share cuts into the soil, opening a temporary trench, which is held open by the side walls of the share, while the cable is lowered to the base of the trench via a depressor. Some plows may use additional jets to fluidize the soil in front of the share.
monopile or monopile foundation	A long steel tube driven into the seabed that supports a tower
nautical mile	A unit used to measure sea distances and equivalent to approximately 1.15 miles (1.85 kilometers)
offshore substation	The interconnection point between the WTGs and the export cable; the necessary electrical equipment needed to connect the inter-array cables to the offshore export cables
onshore substation	Substation connecting the proposed Project to the existing bulk power grid system

Term	Definition
operations and maintenance facilities	Would include offices, control rooms, warehouses, shop space, and pier space
Outer Continental Shelf	All submerged land, subsoil, and seabed belonging to the United States but outside of states' jurisdiction
pile	A type a foundation akin to a pole
pile driving	Installing foundation piles by driving them into the seafloor
pinnipeds	Carnivorous, semiaquatic marine mammals with fins, also known as seals
pin pile	Small-diameter pipe driven into the ground as foundation support
plume	Column of fluid moving through another fluid
private aids to navigation	Visual references on structures positioned in or near navigable WOTUS, including radar transponders, lights, sound signals, buoys, and lighthouses, that support safe maritime navigation; permits for the aids are administered by USCG
Project area	The combined onshore and offshore area where proposed Project components would be located
protected species	Endangered or threatened species that receive federal protection under the ESA of 1973 (as amended)
scour protection	Protection consisting of rock and stone that would be placed around all foundations to stabilize the seabed near the foundations as well as the foundations themselves
scrublands	Plant community dominated by shrubs and often also including grasses and herbs
sessile	Attached directly by the base
silt substrate	Substrate made of a granular material originating from quartz and feldspar, and whose size is between sand and clay
soft-bottom habitat	Benthic habitats include soft-bottom (i.e., unconsolidated sediments) and hard-bottom (e.g., cobble, rock, ledge) substrates, as well as biogenic habitat (e.g., eelgrass, mussel beds, worm tubes) created by structure-forming species
substrate	Earthy material at the bottom of a marine habitat; the natural environment that an organism lives in
suspended sediments	Very fine soil particles that remain in suspension in water for a considerable period of time without contact with the bottom; such material remains in suspension due to the upward components of turbulence and currents, or by suspension
threatened species	A species that is likely to become endangered within the foreseeable future
tidal energy project	Project related to the conversion of the energy of tides into usable energy, usually electricity
tidal flushing	Replacement of water in an estuary or bay because of tidal flow
trawl	A large fishing net dragged by a vessel at the bottom or in the middle of sea or lake water
turbidity	A measure of water clarity
utility right-of-way	Registered easement on private land that allows utility companies to access the utilities or services located there
vibracore	Technology/technique for collecting core samples of underwater sediments and wetland soils

Term	Definition
viewshed	Area visible from a specific location
visual resource	The visible physical features on a landscape, including natural elements such as topography, landforms, water, vegetation, and manmade structures
wetland	Land saturated with water; marshes; swamps
wind energy	Electricity from naturally occurring wind
wind energy area	Areas with significant wind energy potential and defined by BOEM
wind turbine generator	Component that puts out electricity in a structure that converts kinetic energy from wind into electricity

NAAQS = National Ambient Air Quality Standards; NO_2 = nitrogen dioxide

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