

## Appendix C. List of Preparers and Reviewers, & Glossary

### C.1. List of Preparers and Reviewers

**Table C-1 Bureau of Ocean Energy Management Contributors**

Name	Role/Resource Area
<b>National Environmental Policy Act (NEPA) Coordinator</b>	
Sangunett, Brandi	Environmental Protection Specialist
<b>Resource Scientists and Contributors</b>	
Baker, Arianna	Navigation and Vessel Traffic
Baker, Kyle	Marine Mammals; Sea Turtles; NMFS BA
Bigger, David	Birds; Bats; Coastal Habitat and Fauna; USFWS BA
Brune, Genevieve	Land Use and Coastal Infrastructure
Bucatari, Jennifer	Other Uses
Chaiken, Emma	Commercial Fisheries and For-Hire Recreational Fishing; Recreation and Tourism
Cornelison, Meghan	Environmental Justice
De Zeeuw, Maureen	Birds
Dobbs, Kerby	Other Uses
Draher, Jennifer	Water Quality
Feinberg, Lucas	Project Coordinator
Hesse, Jeffrey T.	Other Uses
Horrell, Christopher	Cultural Resources; FOE; Section 106 Consultation
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, NMFS BA; EFH Assessment
Jensen, Mark	Demographics, Employment, and Economics; Recreation and Tourism
Klein, Kimberly	Marine Mammals, Planned Activities Scenario
McCarty, John	Visual Resources; Recreation and Tourism
McCoy, Angel	Meteorologist, Technical Design Elements
Miller, Jennifer	Other Uses
Moshier, Marissa	Cultural Resources; FOE; Section 106 Consultation
Richards, Renee	Other Uses
Schnitzer, Laura	Cultural Resources; FOE; Section 106 Consultation
Slayton, Ian	Air Quality, Planned Activities Scenario
Stokely, Sarah	Cultural Resources; FOE; Section 106 Consultation
Sullivan, Kim	Environmental Justice

FOE = Findings of Effect

**Table C-2 BOEM and Cooperating Agency Reviewers**

Name	Title	Agency
<b>BOEM and DOI Reviewers</b>		
Baker, Karen	Chief, Environment Branch for Renewable Energy	BOEM
Brown, William	Chief Environmental Officer	BOEM
Melendez-Arreaga, Pedro	Lead Attorney-Advisor, Office of the Solicitor	DOI
Ottman, Noel	Attorney-Advisor, Office of the Solicitor	DOI
Stromberg, Jessica	Deputy Branch Chief, Environment Branch for Renewable Energy	BOEM
Vorkoper, Stephen	Attorney-Advisor, Office of the Solicitor	DOI
<b>Cooperating and Participating Agency Reviewers</b>		
Crocker, Julie	Endangered Fish Branch Chief, GARFO Protected Resources Division	NMFS
Desautels, Michele	District 1	USCG
Heckman, Andrea	Lead Environmental Protection Specialist	BSEE
Hanson, Keith	Marine Habitat Resource Specialist, GARFO Habitat and Ecosystem Services Division	NMFS
Kallgren, Maureen	Marine Transportation Specialist	USCG
Krueger, Mary	Energy Specialist, Interior Region 1, North Atlantic - Appalachian	NPS
McLean, Laura	Ocean and Lakes Policy Analyst	NYSDOS
Minck, Chris	New York District, Regulatory, Project Manager	USACE
NYSDEC	Division of Air Resources Division of Environmental Permits Division of Fish and Wildlife Division of Marine Resources	NYSDEC
Petriman, Viorica	Environmental Engineer, Air & Radiation Division, Permitting Section, USEPA Region 2	USEPA
Tuxbury, Susan	Wind Program Coordinator, GARFO Habitat and Ecosystems Division	NMFS
USCG	Sector New York and Sector Long Island Sound	USCG

DOI = U.S. Department of the Interior; GARFO = Greater Atlantic Regional Fisheries Office; HESD = Habitat and Ecosystem Services; NPS = National Park Service; NYSDOS = New York State Department of State

**Table C-3 Consultants**

Name	Company	Role/Resource Area
Baer, Sarah	ICF	Environmental Justice
Byram, Saadia	ICF	Editor
Copeland, Tanya	ICF	Project Manager
Diller, Elizabeth	ICF	Project Director
Ernst, David	ICF	Air Quality
Johnson, Dave	ICF	Bats; Birds; Coastal Habitat and Fauna; Wetlands; Water Quality; USFWS BA
Jost, Rebecca	ICF	Other Uses; Land Use and Coastal Infrastructure; Recreation and Tourism
Paulson, Merlyn	ICF	Scenic and Visual Resources

Name	Company	Role/Resource Area
Stoll, Jean	ICF	Cultural Resources; FOE; CHRVEA
Tavel, January	ICF	Cultural Resources; FOE; CHRVEA
Valley, Nathalie	ICF	Navigation and Vessel Traffic
Baggett, Lesley	AKRF	Benthic
DeFalco, Lorianne	AKRF	Demographics, Employment and Economics
Krebs, Justin	AKRF	QA/QC; NMFS BA; EFH Assessment
Lozano, Carlos	AKRF	Finfish, Invertebrates, EFH
Manhard, Chris	AKRF	Commercial Fisheries and For-Hire Recreational Fisheries
Manhard, Rachael	AKRF	Marine Mammals; Sea Turtles; NMFS BA

CHRVEA = Cumulative Historic Resources Visual Effects Analysis; QA/QC = quality assurance/quality control

## C.2. Glossary

Term	Definition
affected environment	Environment as it exists today that could be potentially affected by the proposed Projects
algal blooms	Rapid growth of the population of algae, also known as algae bloom
allision	A moving (drift or powered) vessel hitting a stationary object
anthropogenic	Generated by human activity
Applicant-proposed measures	Applicant-proposed measures to avoid, minimize, or mitigate potential impacts
attenuation	The gradual loss of acoustic energy from absorption and scattering as sound propagates through a medium
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
collision	Two or more moving vessels hitting each other
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 National Ambient Air Quality Standards: CO, lead, nitrogen dioxide, ozone, particulate matter, or SO <sub>2</sub>
critical habitat	Geographic area containing features essential to the conservation of threatened or endangered species

Term	Definition
cultural resource	Precontact or contact districts, objects, places, sites, buildings, structures, shipwrecks, and archaeological sites and collections on the American landscape, as well as sites of traditional, religious, or cultural significance to cultural groups, including Native American tribes
cumulative impacts	Impacts that could result from the incremental impact of a specific action, such as the proposed Projects, 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
Earth curvature	Mathematical calculation of the Earth curvature over the ocean's surface defines the physical structure height(s) at which the Projects' WTGs and OSS are visible from offshore and onshore view receptors
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)
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 Projects would have on the environment
environmental justice communities	Minority and low-income populations affected by the proposed Projects
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
field of view	The horizontal or vertical extent of the observable landscape seen at any given moment, usually measured in degrees
finfish	Vertebrate and cartilaginous fishery species, not including crustaceans, cephalopods, or other mollusks

Term	Definition
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; for example, piled jacket or monopile
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
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 or buoy
impact-producing factors	Resulting from the construction and installation, operations and maintenance, and decommissioning of the Projects
impulsive sound	Sound that is typically brief and intermittent with rapid rise time and decay back to ambient levels (for example, impact pile driving)
infauna	Fauna living in the sediments of the ocean floor (or river or lake beds)
interarray cables	Cables connecting the WTGs to each other and to the OSS
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 Projects, 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)

Term	Definition
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 Projects to the existing bulk power grid system
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
permanent threshold shift	A permanent loss of hearing sensitivity caused by excessive noise exposure (considered an auditory injury)
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
point of interconnection	Location where the power generated by the Projects is connected to the existing electric power grid.
private aids to navigation	Visual references on structures positioned in or near navigable waters of the United States, 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

Term	Definition
seascape and landscape impact assessment	Seascape and landscape impact assessment methodologies analyze impacts on both the physical elements and features that make up a landscape, seascape, or open ocean; and the aesthetic, perceptual, and experiential aspects of the landscape, seascape, or open ocean that make it distinctive
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
temporary threshold shift	Temporary loss of hearing sensitivity caused by excessive noise exposure
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
transition bay	A clean, dry environment for jointing the offshore and onshore cable and providing protection to the cable joint during operation
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
viewshed	Area visible from a specific location
visual impact assessment	Visual impact assessment analyzes and evaluates the impacts on people of adding the proposed development to views from selected viewpoints
visual resource	The visible physical features on a landscape, including natural elements such as topography, landforms, water, vegetation, and manmade structures
Waters of the United States	“Waters of the United States” applies to the jurisdictional limits of the authority of USACE under the CWA. Waters of the United States include those waters listed in § 328.3(a). The lateral limits of jurisdiction in those waters may be divided into three categories. The categories include the territorial seas, tidal waters, and non-tidal waters (see 33 CFR 328.4(a), (b), and (c), respectively).
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

Term	Definition
wind turbine generator	Component that puts out electricity in a structure that converts kinetic energy from wind into electricity