Appendix K

Glossary

Appendix K: Glossary

K.1 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 striking a stationary ship or other stationary object
anthropogenic	Generated by human activity
applicant-proposed measure	Measure proposed by applicant to avoid, minimize, or mitigate potential impacts
archaeological resource	Historical place, site, building, shipwreck, or other archaeological site on the landscape
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
cable landing location	Location where the submarine export cable transitions to an onshore underground cable
cable protection	Material (e.g., rock, concrete mattresses) placed over an offshore cable to prevent damage to the cable
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	Coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states; includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches
collision	Two or more moving vessels striking 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
construction staging activities	Activities conducted in port such as component fabrication and assembly; offloading and loading shipments of Project components; storing Project components; preparing Project components for installation; and preparing vessels to tow floating components to the WTA
crew transfer vessel	A relatively small vessel used to transfer crew and supplies from port to the Offshore Project area
criteria pollutant	One of six common air pollutants for which the USEPA sets NAAQS: CO, Pb, NO_2, O_3, PM, or SO_2
critical habitat	Geographic area containing features essential to the conservation of threatened or endangered species

Term	Definition
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; they can occur from individually minor, but collectively significant actions that take place over time
demersal	Living close to the ocean floor
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 HDPE or PVC 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 Project's WTGs and OSSs are visible from offshore and onshore view receptors
ecosystem	Community of interacting living organisms and nonliving components (such as air, water, soil)
electric service platform (ESP)	See *offshore substation (OSS)*
electromagnetic field (EMF)	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 and installation, 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
environmental protection measure	Measure proposed to avoid or minimize potential impacts
epifauna	Fauna that live on the surface of a seabed (or riverbed), or are attached to underwater objects or aquatic plants or animals
essential fish habitat (EFH)	"Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (50 CFR Part 600)
export cable	Submarine transmission cable connecting the wind energy facility OSSs to the landfall site location of onshore electrical grid power
export cable corridor (ECC)	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

Term	Definition
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 steel or concrete base structure to which the WTGs, OSSs, and met tower are affixed to the seabed using piles, suction buckets, or gravity
geomagnetic	Relating to the magnetism of the Earth
gravity-based structure	Type of foundation consisting of heavy steel-reinforced concrete and/or steel structure that sits on the seabed
gravity pad tetrahedron base	Type of foundation that is composed of a tetrahedral-shaped (i.e., three-legged pyramidal) frame that rests on the seabed and is secured in place using high weight pads (i.e., gravity pads) below each leg
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 (HDD)	Trenchless technique for installing underground cables, pipes, and conduits using a surface-launched drilling rig
hull	Watertight frame or body of a ship
impact-producing factors (IPFs)	Resulting from the construction and installation, O&M, and decommissioning of the Project
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	Submarine transmission cables that connect groups of WTGs to an OSS
interconnection facility	Substation connecting the proposed Project to the existing bulk power grid system
interlink cables	Submarine transmission cables that may be used to connect the OSSs together
invertebrate	Animal with no backbone
jacket foundation	Type of foundation with three to six supporting legs secured to the seafloor using piles driven into the seabed or suction buckets at the base of each leg
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's share creates a narrow trench at the designated depth, while water jets in the plowshare fluidize the sediment within the trench; in the case of the proposed Project, the cables would be fed through the plow and laid into the open trench as the plow moves forward; the fluidized sediments then settle back down into the trench and bury the cable
knot	Unit of speed equaling one nautical mile per hour
landfall site	Shoreline landing site at which the offshore cable transitions to onshore
Lease Area OCS-A 0499 (Lease Area)	The entire lease area OCS-A 0499 that Atlantic Shores acquired from BOEM

Term	Definition
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 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 seabed, 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 seabed in front of the share
mechanical trenching	Method of submarine cable installation equipment that involves a cutting wheel, and may be equipped with a jetting sword 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
meteorological and oceanographic (metocean) buoy	Buoys temporarily installed in the WTA to monitor weather and sea state conditions during construction
meteorological (met) tower	Tower permanently installed in the WTA to measure meteorological conditions during construction and operations
micrositing	The process through which the specific location of planned infrastructure (i.e., wind turbine, interarray cables, export cables, and offshore substations) installation is determined to avoid complex or sensitive habitats, historic properties, and hazards.
mono-bucket	Type of foundation composed of a single suction bucket supporting a single steel or concrete tubular structure (similar to a monopile)
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 export cable	Cables that transfer electricity from the OSSs to the cable landing locations
offshore infrastructure	Turbines, OSSs, met tower, temporary metocean buoys, and interarray cables, interlink cables, and offshore export cables
Offshore Project area	Lease Area and offshore export cable corridors
offshore substation (OSS)	The interconnection point between the WTGs and the export cable; the necessary electrical equipment including transformers needed to connect the interarray cables to the offshore export cables
onshore export cable	Underground cables that transfer electricity from the cable landfall to the onshore substations, converter stations, or both
onshore infrastructure	Cable landing locations, onshore substations, converter stations, or both, onshore interconnection cables, POIs, and O&M facility
onshore interconnection cable	Onshore transmission cable installed within a buried duct back that connects a landfall site to an OSS and/or converter station and subsequently to a POI
Onshore Project area	Onshore Project components including cable landing locations, onshore export cable corridors, onshore substations and/or converter stations, and O&M facility
onshore substation and/or converter station	Substation and/or converter station connecting the proposed Project to the existing bulk power grid system; a converter station would be used if HVDC export cables are used; a substation would be used if HVAC export cables are used
operations and maintenance (O&M) facility	Would include offices, control rooms, warehouse space including lifting facility, shop space, and pier space including vessel mooring, crane, and berthing area, and potentially including a communications antenna and helicopter pads

Term	Definition
Outer Continental Shelf (OCS)	All submerged land, subsoil, and seabed belonging to the United States but outside of states' jurisdictions
pile	A type of foundation akin to a pole
pile driving	Installing foundation piles by driving them into the seafloor
piled jacket	Type of foundation consisting of a steel lattice structure that is fixed to the seabed using piles connected to each leg of the jacket
pinnipeds	Carnivorous, semiaquatic marine mammals with fins, including seals, sea lions, and walruses
pin pile	Small-diameter pipe driven into the ground as foundation support
plume	Column of fluid moving through another fluid
point of interconnection (POI)	An existing substation where the power generated by the Project 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
Project design envelope (PDE)	The range of proposed Project characteristics defined by the applicant and used by BOEM for purposes of environmental review and permitting
protected species	Endangered or threatened species that receive federal protection under the ESA of 1973 (as amended)
scour protection	Protection consisting of rock, concrete, and/or 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
seascape and landscape impact assessment (SLIA)	SLIA 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
service operation vessel	Relatively large vessel that offers considerable capacity for personnel and spare parts, allowing for service trips that are several weeks in duration; includes sleeping quarters for technicians and may include workshop space
sessile	An organism attached directly by the base, having no stalk
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 composed of soft-bottom (i.e., unconsolidated sediments) substrates
splice vault	Underground concrete box where segments of the onshore interconnection cable are joined together
substrate	Earthy material at the bottom of a marine habitat; the natural environment that an organism lives in
suction bucket jacket	Type of foundation consisting of a steel lattice structure that is fixed to the seabed by suction buckets installed below each leg of the jacket
suction bucket tetrahedron base	Type of foundation that is composed of a tetrahedral-shaped (i.e., three-legged pyramidal) frame that rests on the seabed and is secured to the seafloor using suction buckets
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

Term	Definition
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 piece	Part of the foundation structure that contains a flange for connection to the WTG tower and may include secondary structures such as a boat landing, ladders, a work platform, a crane, and other ancillary components; a transition piece may be installed on top of a monopile, mono-bucket, or gravity-based structure foundation
transition vault	Type of splice vault located at a landfall site where the export cables are connected to the onshore interconnection cables
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 (VIA)	A VIA 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 anthropogenic structures
wetland	Land inundated or saturated with surface or groundwater; generally including marshes; swamps, bogs, and similar areas
wind energy	Electricity generated from naturally occurring wind
wind energy area	Area identified as suitable for offshore renewable energy development by BOEM through a multi-year, public environmental review process
wind turbine area (WTA)	The portion of the Lease Area where the Project would be developed
wind turbine generator (WTG)	Component that generates electricity in a structure that converts kinetic energy from wind into electricity