Environmental Mitigation Plan
for
Attentive Energy One

Version 1.0

Prepared pursuant to [contract number, date (TBD)]

with

New York State Energy Research and Development Authority

Albany, NY

Prepared by

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Record of Revision

Revision Date	Description of changes	Revision on pages
January 2023	Original version prepared in response to ORECRFP22-1	N/A

Communication Officers, Contact Information, Links

Links to Project Information:

Project website: www.attentiveenergy.com
Twitter: @ThisIsAttentive
LinkedIn: Attentive Energy

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1. Environmental Mitigation Plan Summary

1.1 Overall philosophy and principles

This section should describe the overall philosophy and principles the Developer will follow to avoid, minimize, restore, and off-set potential impacts to environmental resources.

- Attentive Energy seeks to achieve no net loss of biodiversity through meaningful, transparent, and proactive stakeholder engagement throughout all phases of the Project's lifecycle. These engagement efforts include:
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
- Attentive Energy will strive to avoid or mitigate adverse impacts to natural resources in the Project area, while optimizing Project-related activities in a way that ensures safety and maximizes the benefits of offshore wind. Attentive Energy will do so by:
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]

1.2 Overall approach to incorporating data and stakeholder feedback

This section should describe how the Developer will use research, data, and stakeholder feedback to update the EMP and support decision-making throughout the life cycle of the project (preconstruction, surveys, site design, construction, operations, and decommissioning).

- [redacted]
- [redacted]

- [redacted]
- [redacted]
- Additionally, Attentive Energy will:
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]

1.3 Existing guidance and best practices that will be followed

This section should present a list of existing guidance documents, publications, tools, and/or plans that will be followed to support the EMP. Include links, if available, for all references.

- Attentive Energy will follow the guidance provided in the following documents, updating the list of guidance documents as appropriate:
  - Anticipated best-practice guidance tools that may be developed through initiatives such as the New York State Energy Research and Development Authority's (NYSERDA) Environmental Technical Working Group (E-TWG) and Fisheries Technical Working Group (F-TWG), Responsible Offshore Science Alliance (ROSA), Regional Wildlife Science Collaborative (RWSC), National Offshore Wind Research and Development Consortium (NOWRDC), Responsible Offshore Development Alliance (RODA) Task Force, and other groups.
  - NOAA NMFS. 2018. 2018 Revision to: Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing: Underwater Acoustic Thresholds for Onset of Permanent and Temporary Threshold Shifts, April 1, 2018. Available at: https://www.fisheries.noaa.gov/resource/document/technical-guidance-assessingeffectsanthropogenic-sound-marine-mammal-hearing
  - NMFS Greater Atlantic Regional Fisheries Office (GARFO). 2021. Updated Recommendations for Mapping Fish Habitat. NMFS GARFO Habitat Conservation and Ecosystem Services Division. Available at: https://media.fisheries.noaa.gov/2021-03/March292021_NMFS_Habitat_Mapping_Recommendations.pdf?null
  - BOEM. 2019a. Guidelines for Providing Information on Marine Mammals and Sea Turtles for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 C.F.R. Part 585 Subpart F. Available at: https://www.boem.gov/sites/default/files/renewable-energy-program/Regulatory-Information/BOEM-Marine-Mammals-and-Sea-Turtles-Guidelines.pdf
  - BOEM. 2019b. Guidelines for Providing Information on Fisheries for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585. Available at:

https://www.boem.gov/sites/default/files/renewable-energy-program/BOEM-Fishery-Guidelines.pdf

- BOEM. n.d.a. Previously Identified Offshore Wind Development Concerns. Available at: https://www.boem.gov/sites/default/files/uploadedFiles/Fishing%20Concerns.pdf
- McCann 2012. Developing Environmental Protocols and Modelling Tools to Support Ocean Renewable Energy and Stewardship. Available at: https://espis.boem.gov/final%20reports/5208.pdf
- Petruny-Parker et al. 2015. Identifying Information Needs and Approaches for Assessing Potential Impacts of Offshore Wind Farm Development on Fisheries Resources in the Northeast Region. Available at: https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/Renewable-Energy/OCS-Study-BOEM-2015-037.pdf
- Mid-Atlantic Fishery Management Council (MAFMC) 2014. Offshore Wind Best Management Practices Workshop. Available at: https://www.mafmc.org/council-events/2014/offshore-wind-best-management-practices-workshop
- BOEM 2019c. Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 C.F.R. Part 585. Available at: https://www.boem.gov/sites/default/files/renewable-energy-program/Regulatory-Information/BOEM-Renewable-Benthic-Habitat-Guidelines.pdf
- NMFS 2022. EFH mapper tool for species identification and habitat characteristics at any particular location. Available at: http://www.habitat.noaa.gov/protection/efh/habitatmapper.html
- BOEM. 2020a. Guidelines for Providing Information on Fisheries Social and Economic Conditions for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 C.F.R. Part 585. October 20, 2015. Available at: https://www.boem.gov/sites/default/files/documents/about-boem/Social%20%26amp%3B%20Econ%20Fishing%20Guidelines.pdf
- BOEM 2020b. Guidelines for Providing Avian Survey Information for Renewable Energy Development on the Outer Continental Shelf. United State Department of the Interior – Bureau of Ocean Energy Management, Office of Renewable Energy Programs. May 27, 2020. Available at: https://www.boem.gov/sites/default/files/documents/newsroom/Avian%20Survey%20Guidelines.pdf
- The application of lessons learned from the US as the offshore wind industry develops, and lessons learned from wind farm decommissioning activities in Europe.

2. Communications and Collaboration Approach

2.1 Overview and communication plan objectives

This section should provide an overview of the communication plan and objectives and its importance in environmental mitigation.

- Attentive Energy will seek methods and processes to allow for a two-way flow of information between key stakeholders and developers, specifically highlighting how Attentive Energy uses this feedback to inform their decision making.
- Attentive Energy will provide updates to environmental stakeholders in an appropriate manner that can be easily accessed and widely distributed.
- Additionally:
    - Attentive Energy is committed to meaningful, transparent, and proactive stakeholder engagement to ensure environmentally, economically, and socially responsible offshore wind development;
    - Attentive Energy will employ a transparency-based approach to Project development and permitting by sharing Project updates, plans, timing of geological and geophysical surveys, design features (e.g., turbine spacing, turbine orientation, export cable routes), data, and other relevant information throughout all stages of the Project to allow for stakeholder input;
    - Attentive Energy will communicate frequently and proactively throughout the life of the Project (i.e., from pre-construction to decommissioning);
    - Attentive Energy will share Project information and seek stakeholder input through port hours, public meetings, open houses, virtual and in-person meetings with agencies and other stakeholders, stakeholder working groups, round-table discussions, Project electronic newsletters, and website updates;
    - Attentive Energy will understand stakeholder concerns and interests;
    - Attentive Energy will identify and develop actionable objectives where practical;
    - Attentive Energy will strive to understand the communities' needs and diverse perspectives, as well as maintain a responsive dialogue with all stakeholder groups.

2.2 Communication officers/positions, responsibilities, and contact information

This section will provide a list of communication officers, their role, and name and contact information. The list should provide stakeholders with an understanding of who should be called for a particular issue or question. It will also include links to the project website so readers know where to find additional information.

[redacted]

www.attentiveenergy.com

2.3 Identification of stakeholders

This section should describe the process by which stakeholders will be identified and classified by stakeholder group.

- Attentive Energy has initiated outreach efforts, including regular port visits, surveys, and multi-platform communications to introduce the Attentive Energy team, identify early stakeholder concerns, and answer stakeholder questions to the best of its ability.
- Through pre-development outreach efforts, Attentive Energy has developed a comprehensive contacts list as well as valuable relationships that will continue throughout the Project's lifecycle.
- Attentive Energy will continue to identify key contacts and stakeholders throughout the life of the Project.
- [redacted]

2.4 Participation in stakeholder and technical working groups

2.4.1 Communication with E-TWG

This should describe the communication and collaboration approach with members of the E-TWG and consultations.

- Attentive Energy will dedicate Project-specific technical resources to the E-TWG.
- To the extent practicable, Attentive Energy will work with the E-TWG and will attend E-TWG meetings and workshops.
- Attentive Energy will identify specific individuals to serve at least one-year terms in the role of primary and secondary core members.
- Additionally:
  - [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]

2.4.2 Communication with other New York State agencies

This should describe communication with New York State agencies during each phase of the project.

- Attentive Energy will continue to coordinate with New York (NY) State agencies throughout the Project development and the permitting process.
- Attentive Energy will provide NY State agencies with Project updates and plans, data collected during the pre-construction, construction, and post-construction phases, information regarding marine resources in the Project Area, and mitigation strategies developed based on monitoring data.
- Attentive Energy will schedule introductory meetings with NY State agencies during the early stages of Project development, offer quarterly update meetings to State agencies (or a quarterly newsletter or emailed Project update, if more appropriate for the Project stage or needs at that time), and schedule individual agency meetings per topic (e.g., State onshore, coastal, and nearshore resources, State permitting requirements) as needed throughout the life of the Project.
- Attentive Energy will coordinate with the New York State Department of Environmental Conservation (NYSDEC) regarding survey activities (including seasonal timing restrictions), cable routing and landfall, port infrastructure and facilities, fisheries engagement and outreach, stormwater permits, and any needed reviews or permits related to State and Federally-listed species.
- Attentive Energy will coordinate with New York State Public Service Commission (NYSPSC) and the New York State Department of Public Service (NYSDPS) regarding all State permitting activities and anticipates regular meetings with these agencies prior to and during the Article VII permitting process.
- Attentive Energy will coordinate with the New York State Department of State (NYSDOS) on geotechnical surveys in NY State waters as well as any activities that would require coastal zone management reviews.
- Attentive Energy will engage with other State agencies as needed to ensure effective, transparent communication and coordination and consistency with NY State plans and regulations.

2.4.3 Communication with other stakeholder and working groups

This should describe any relevant participation and collaboration with other developers in the offshore space, with a focus on communication and collaboration with adjacent leaseholders. This may include but is not limited to shared research efforts, coordination of survey methods, or standardization of navigational and safety protocols.

- Attentive Energy will seek to collaborate with other regulatory agencies and stakeholder groups and consider memberships and participation in such collaborative efforts (e.g., E- TWG, F-TWG, ROSA, RWSC, etc.).
- Additionally:
    - Attentive Energy has joined the Advisory Council of ROSA, an independent organization dedicated to providing for, and advancing, regional research and monitoring of fisheries and offshore wind interactions in federal waters through collaboration and cooperation;
    - Attentive Energy has joined the RWSC, a collaborative consisting of researchers, offshore wind developers, federal and state agencies, and environmental NGOs with a mission that includes advancing scientific research and environmental/wildlife data collection through research and monitoring for different species around offshore wind in the New York Bight (NYB) and throughout the region at large.
    - Attentive Energy is an active attendee at Mid-Atlantic Fisheries Management Council and New England Fisheries Management Council meetings;
    - [redacted]
    - [redacted]
        - [redacted]
        - [redacted]
        - [redacted]
        - [redacted]
        - [redacted]
        - [redacted]
        - [redacted]
    - Attentive Energy will continue to engage with the general public through open houses, public meetings, and website updates;

2.4.4 Communication and collaboration with other developers

This should describe any relevant participation and collaboration with other developers in the offshore space, with a focus on communication and collaboration with adjacent leaseholders. This may include but is not limited to shared research efforts, coordination of survey methods, or standardization of navigational and safety protocols.

- Attentive Energy will seek to maximize the impact of research efforts such as data collection, methodology, analysis, and dissemination by collaborating with other developers, particularly those in adjacent Lease Areas, taking on similar initiatives.
- Additionally:
    - Attentive Energy actively participates in all relevant offshore wind organizations that involve other developers, such as E-TWG, F-TWG, RWSC Offshore Wind Industry Caucus, ROSA, NOWRDC, and American Clean Power.

2.5 Communication methods and tools by phase

This section should describe the communication and outreach methods and tools that will be employed for each

stakeholder group during each phase of the Project.

Proposed Outreach Method/Tools	Phase*			
	1	2	3	4
Public meetings, port hours, and open houses	X	X	X	X
Participation in stakeholder workgroups	X	X	X	X
Environmental Non-Governmental Organization (NGO) round table discussions	X	X	X	X
State and Federal agency meetings	X	X	X	X
Meetings with Tribal groups	X	X	X	X
Participation in E-TWG and F-TWG meetings	X	X	X	X
Project newsletters and updates	X	X	X	X
Website-based Project promotion	X	X	X	X
*Phase: 1: Survey/Design; 2: Construction; 3: Operation; 4: Decommissioning				

3. Supporting Other Research

3.1 Support of collaborative research

This section should describe how opportunities for developing or investing in collaborative research with the environmental community to collect ecological data will be identified and undertaken. The description must account for the need to coordinate with members of the E-TWG during data gathering and assessment.

- Attentive Energy will commit to being an active member of regional science organizations (e.g., Regional Wildlife Science Entity, Responsible Offshore Science Alliance).
- Additionally:
    - Attentive Energy's primary coordination has been and will continue to be with NYSERDA's F-TWG, E-TWG, ROSA, RWSC, and NOWRDC;
    - Attentive Energy joined the advisory council of ROSA in 2022;
    - Attentive Energy proactively joined RWSC in January 2022, prior to winning the Lease Area;
    - [redacted]
    - [redacted]

3.2 Handing/processing requests

This section should describe how requests for coordination with third-party supported scientists will be processed - including providing reasonably-requested Project data and access to the Project area for independent scientists examining environmental sensitivities and/or the impacts of offshore wind energy development on the environment for the purpose of publication in peer-reviewed journals.

- Attentive Energy will aim to meet with, and discuss, prospective research with interested parties when contacted.
- [redacted]
- Attentive Energy will manage any requests for non-publicly available data on a case-by-case basis, where certain data may be shared under non-disclosure agreements to facilitate collaboration.

3.3 Data availability

This section should describe how data will be made available in accordance with Section 2.2.8 of the RFP

- Attentive Energy will seek to promote openness and transparency in data sharing with regulatory agencies, the research community, and the general public by establishing a data sharing process or portal, which is maintained by a Data and Information Officer and updated in a timely manner as new datasets and non-proprietary information become available.
- Attentive Energy will work with end users of these datasets and other data products in establishing this process to ensure an agreed-upon approach to provide open and convenient access to this information.

- Attentive Energy will aim to make all scientific data collected during the Project lifecycle publicly available, to the extent possible, and will seek to have all relevant data published via the appropriate Federal review process and/or via peer-reviewed publications.
- Studies and technical reports that support the Construction and Operations Plan (COP) for the Project will be available to the public once published by BOEM for public comment.
- Prior to disclosure, Attentive Energy will follow quality assurance/quality control protocols for any data to be made available.

3.4 Proposed restrictions

This section should describe any restrictions on data provision or access that may be required to protect trade secrets or maintain site security.

- Attentive Energy shall seek to explain why identified data types are considered commercially sensitive.
- Additionally:
    - In instances where certain information or Project datasets are kept confidential and not shared openly, Attentive Energy will seek to explain why identified data types are considered commercially sensitive;
    - Attentive Energy will seek concurrence from NYSERDA and the regional science organizations with regards to the data types that may most commonly be subject to restrictions to reach agreement on data-sharing restrictions;
    - Attentive Energy will restrict confidential, proprietary, and commercially sensitive data.

3.5 Financial commitment for third party research

This section should provide a level of financial commitment, if elected, that will be appropriated to leverage third-party environmental research funding, including federal or State-supported research. Or, if elected, provide the level of commitment to a general fund for supporting third-party research into potential environmental effects of offshore wind energy development.

- Contingent upon winning a bid under the Request for Proposals ORECRFP22-1, Attentive Energy agrees to provide financial and technical support for "regional monitoring of wildlife and fish and invertebrates that support economically important fisheries" (NYSERDA, 2022a).
- [redacted]
    - [redacted]
    - [redacted]

3.6 Proposed or existing commitments/collaborations

This section should describe proposed or existing commitments and collaborations with third-party researchers in support of monitoring activities and assessing impacts.

- [redacted]
- [redacted]

[redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

4. Proposed Mitigation of Impacts to Marine Mammals and Sea Turtles

4.1 Baseline characterization

4.1.1 Available information

Describe existing key literature and datasets that are available for baseline characterization.

- New York State Offshore Wind Master Plan Marine Mammals and Sea Turtles Study (NYSERDA 2017a)
- Marine mammal density models developed by the Navy (2007, 2012) and Duke University (Roberts et al. 2015, 2016a, 2016b, 2017, 2018, 2020), available through OBIS-SEAMAP (Halpin et al. 2009)
- Sea turtle telemetry data (Coyne and Godley 2005; Halpin et al. 2009; Lockhart 2016, 2017a, 2017b; Mansfield 2017)
- Aerial survey data from the Cetacean and Turtle Assessment Program (CETAP 1981)
- Survey data from the Atlantic Marine Assessment Program for Protected Species (AMAPPS) (NEFSC and SEFSC 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2018, 2019, 2021; Palka et al. 2012, 2021)
- NYSERDA-sponsored aerial surveys (Normandeau and APEM 2016, 2017a, 2017b, 2017c, 2018a, 2018b, 2018c, 2018d, 2018e, 2019b, 2019c, 2020, 2021)
- Marine mammal stock assessment reports (Hayes et al. 2017, 2018, 2019, 2020, 2021; NMFS 2021)
- NYSDEC-sponsored aerial surveys (TetraTech and LGL 2019, 2020; TetraTech and Smultea Sciences 2018)
- Boat surveys conducted by the Wildlife Conservation Society (King et al. 2021)
- NYSDEC-sponsored passive acoustic monitoring and surveys conducted by Cornell University (Estabrook et al 2019, 2020, 2021; Muirhead et al. 2018)
- Passive acoustic monitoring conducted by Woods Hole Oceanographic Institute and the Wildlife Conservation Society (WCS 2022; WHOI 2022)
- Sighting data collected to support ongoing offshore wind activities in the NYB (Empire 2021; Normandeau and APEM 2019a, 2019d; Smultea Environmental Sciences 2018; Stantec 2021)

4.1.2 Data collected

Describe data collected, or will be collected, to support baseline characterization.

- Observations of all right whales and dead, entangled, or distressed marine mammals will be communicated to federal authorities as soon as is practicable, and no later than 24 hours after occurrence.
- Additionally:
    - Attentive Energy will reference BOEM's "Guidelines for Providing Information on Marine Mammals and Sea Turtles for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585" (BOEM 2019) when designing baseline surveys;
    - Baseline data characterization will be achieved through a synthesis of existing data

sources (Section 4.1.1 of this document), use of anticipated PAM data collected over a two-year period by a moored buoy and autonomous underwater vehicle transects, behavior and health assessments, and sighting data collected by Protected Species Observers (PSOs) during site assessment and site characterization surveys.

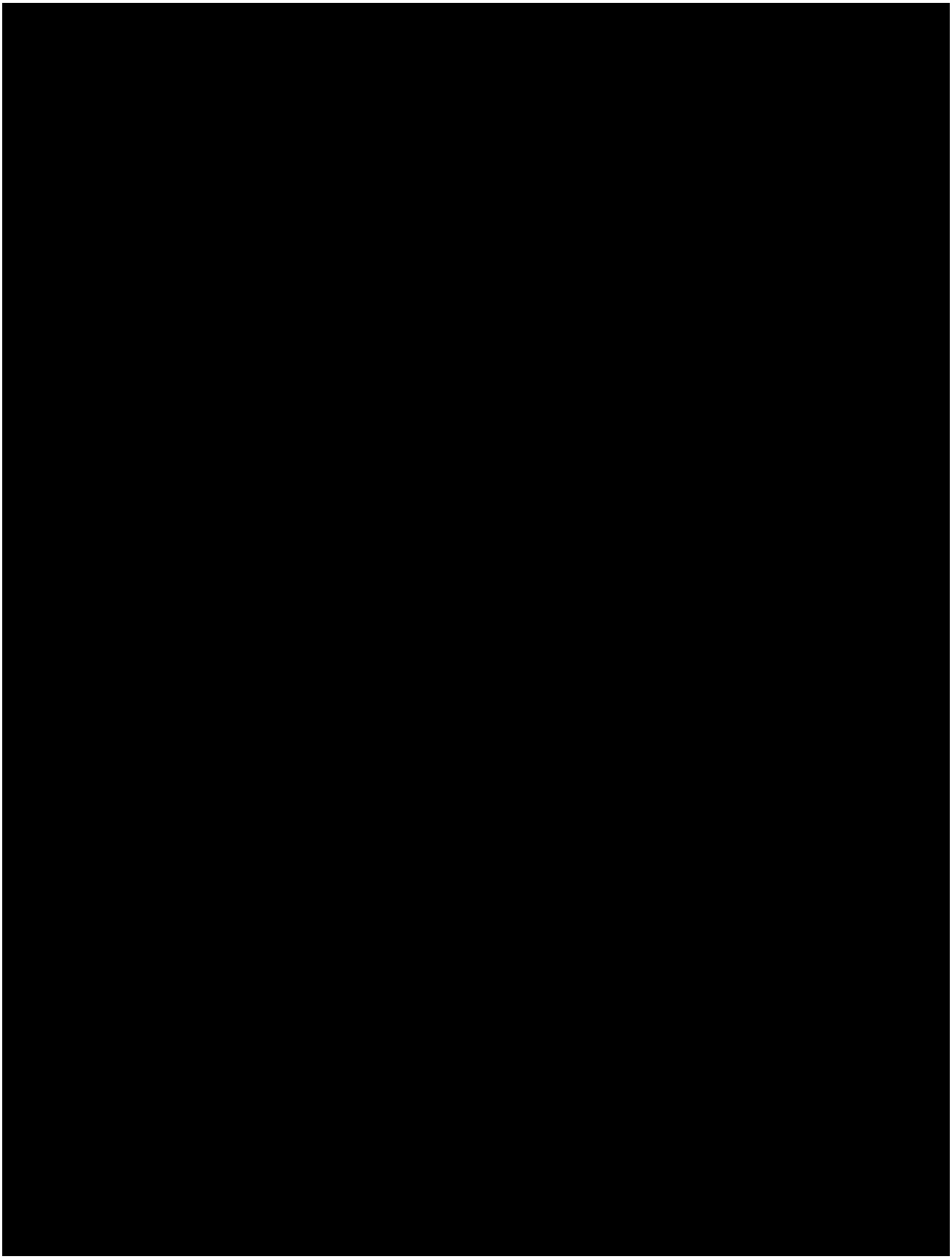
4.2 Species at risk

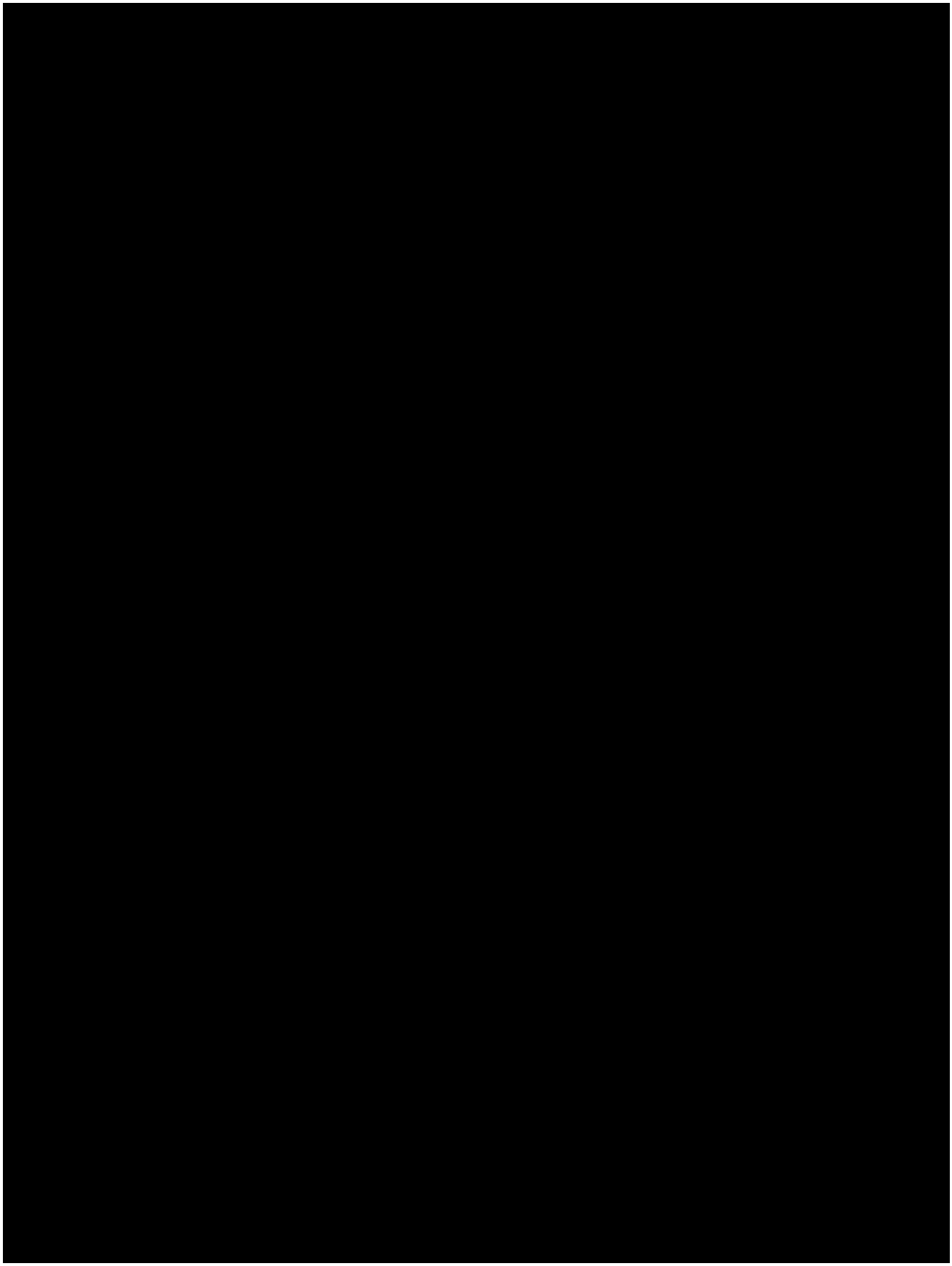
Describe which species the Developer believes to be of greatest concern and why.

- Fifty (50) species of marine mammals are known to occur in U.S. waters of the northwest Atlantic Ocean (BOEM 2021). Of these species, 31 taxa may occur in the NY Bight.
- All of these marine mammal species are protected under the Marine Mammal Protection Act; five species are listed under the Federal ESA:
    - Blue whale *(Balaenoptera musculus*)
    - Fin whale (*Balaenoptera physalus*)
    - Sei whale (*Balaenoptera borealis*)
    - Sperm whale (*Physeter macrocephalus*)
    - North Atlantic right whale (NARW) (*Eubalaena glacialis*).
- Of the 31 taxa that occur in the NY Bight, 12 species are likely to occur in the Project Area:
    - Four mysticetes, including fin whale, humpback whale, minke whale (*Balaenoptera acutorostrata*), and NARW
    - Five odontocetes, including:
        - Atlantic white-sided dolphin (*Lagenorhynchus acutus*)
        - Bottlenose dolphin (*Tursiops truncatus*)
        - Harbor porpoise (*Phocoena phocoena*)
        - Risso's dolphin (*Grampus griseus*)
        - Short-beaked common dolphin (*Delphinus delphis*)
    - Three pinnipeds, including:
        - Gray seal (*Halichoerus grypus*)
        - Harbor seal (*Phoca vitulina*)
        - Harp seal (*Pagophilus groenlandicus*)
- All marine mammal species likely to occur in the Project Area are protected under the Marine Mammal Protection Act. All four sea turtle species and two marine mammal species (i.e., fin whale and North Atlantic right whale) are protected under the ESA. [redacted]

4.3 Potential impacts/risks and mitigation measures by project phase

The table below should list the potential impacts to marine mammals and sea turtles and proposed mitigation measures. To this end, a description of proposed measures to minimize the impacts of sound on marine mammals and sea turtles during all phases of Project development should be included. In addition, provide a description of the anticipated pre- and post-construction survey techniques to establish an ecological baseline and changes to that baseline within the Project site; the minimum size of exclusion zone intended to be monitored during geophysical surveys and construction; planned approaches to understanding marine mammal and sea turtle presence and absence within development site exclusion zone during site assessment and construction (e.g. a combination of visual monitoring by protected species observers and passive acoustic monitoring, the use of night vision and infra-red cameras during nighttime activities, etc.); proposed temporal constraints on construction activities and geophysical surveys with noise levels that could cause injury to harassment in marine mammals (e.g., seasonal restrictions during periods of heightened vulnerability for priority species; commencing activities during daylight hours and good visibility conditions, dynamic adjustments following the detection of a marine mammal); and proposed equipment and technologies the Developer would use to reduce the amount of sound at the source, if any.





[redacted]

4.4 Monitor for potential impacts during each phase

Describe how potential impacts will be monitored on marine mammals and sea turtles during each phase of physical work for the Project (site assessment, construction, operation, and decommissioning) to inform mitigation planning for later phases of the Project as well as for future Projects.

- Attentive Energy will seek to collaborate with regulatory agencies and stakeholder groups to identify research needs and opportunities.
- Pre-construction monitoring will include the use of PSOs to document the occurrence of marine mammals and sea turtles in the Project Area during site assessment and site characterization surveys. Additional pre-construction monitoring programs (e.g., aerial or boat surveys to document habitat use of the Project Area by marine mammals and sea turtles or passive acoustic monitoring to document occurrence of marine mammals) will be developed based on agency and stakeholder input to complement prior and ongoing studies and address existing data gaps.
- Post-construction monitoring will be conducted to improve Attentive Energy's understanding of impacts of operating offshore wind farms on marine mammals and sea turtles. This may include the use of PSOs during post-construction surveys to document the occurrence of marine mammals and sea turtles in the Project Area or passive acoustic monitoring (PAM) to document occurrence of marine mammals and sea turtles in the vicinity of the Project Area. Similar to pre-construction monitoring, post-construction monitoring programs will be developed based on agency and stakeholder input.
- Attentive Energy plans to partner with:
    - [redacted]
    - [redacted]
    - [redacted]
    - [redacted]
    - [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]

4.4.1 Assess and quantify changes

Describe how changes to environmental resources will be quantified using statistically sound methods.

- Ideally, specific questions and focal taxa will be chosen for the Project either based on site-specific fisheries risk assessment, or in relation to broader regional efforts to assess variation between sites and understand cumulative impacts for sensitive species.
- Monitoring will, to the extent practicable, use appropriate study designs and methodologies to establish baseline conditions from which to effectively analyze risk prior to construction and to evaluate impacts during construction and operation by testing hypotheses and helping to assure adequate statistical power for meaningful data analysis.
- Outside expertise will, if practicable, be consulted during study design and data analysis processes.
- Additionally:
    - The extensive monitoring and behavioral data described previously will be used to assess pre-, during, and post-construction changes in marine mammal presence and abundance.
    - Sea turtle and marine mammal presence and abundance will also be informed by data obtained during pre-construction surveys will be supplemented from PSOs and/or PAM during site assessment and characterization surveys of the Project Area.
    - Sea turtle tagging will also be considered as part of the at-sea monitoring conducted for marine mammals.
    - [redacted]
        - [redacted]
        - [redacted]

4.4.2 Address data gaps

Describe how data gaps will be addressed.

- Attentive Energy will work with stakeholders, including regulatory agencies and local groups, in the design phase of the Project to identify data gaps to be addressed through surveys or permitting applications.
- The numerous existing and ongoing studies in the NYB provide sufficient information to describe existing occurrence and habitat use of marine mammals and sea turtles in the Project Area. Data gaps exist concerning the impacts of offshore wind farm construction and operation, particularly the impacts of operational wind farms on large cetaceans. As noted above, Attentive Energy will work with relevant agencies and stakeholder groups to develop pre- and post-construction monitoring programs to address these data gaps.

4.5 Strategies for developing alternate protocols

Describe the process for determining when mitigation strategies are insufficient and under what conditions they might elect to rehabilitate or restore impacted marine mammals and sea turtles in an alternative location.

- As necessary, Attentive Energy will explore this further in consultation with the E-TWG, regulatory agencies and relevant stakeholders.
- [redacted]

5. Proposed Mitigation of Impacts to Birds and Bats

5.1 Baseline characterization

Describe how baseline data will be established on the presence of bird and bat assemblages, temporal and spatial use of the site by key species within the area of the proposed Project.

5.1.1 Available information

Describe key existing literature and datasets that are available for baseline characterization.

- Attentive Energy will synthesize existing information about offshore bird and bat presence, abundance, species composition, vertical distribution, and phenology from various sources, including peer-reviewed literature, gray literature (e.g., unpublished reports, environmental review documents from prior mid-Atlantic offshore wind projects), government reports and databases, site-specific studies conducted by wind farm developers, and academic studies. Together, these represent the primary sources of available, existing information that Attentive Energy will use to characterize baseline conditions for birds and bats in its proposed site and surrounding study area.
    - Attentive Energy will rely on the following sources for its baseline characterizations of birds and bats in the Project Area:
        - NYSERDA. 2017c. New York State Offshore Wind Master Plan Birds and Bats Study Final Report.
        - Avian habitat-based density and distribution estimates (e.g., Curtice et al. 2019)
        - Avian offshore tracking studies (e.g., Loring et al. 2019)
        - Bat coastal and offshore monitoring studies (e.g., Peterson 2016)
        - NYSERDA-supported digital aerial baseline surveys (NYSERDA 2017xx)
        - Satellite telemetry studies of diving bird usage and movement patterns (Spiegel et al. 2017)
        - Studies of bird population size and ecological traits (e.g., Robinson Willmott 2013)
        - NYSDEC Environmental Resource Mapper (NYSDEC 2022)
        - USFWS IPaC (Information for Planning and Consulting) Database (USFWS 2022)
        - New York Natural Heritage Program Database (NYNHP 2022)

5.1.2 Data collected

Describe data collected, or will be collected, to support baseline characterization.

- Attentive Energy will work with third parties to collect site-specific data on birds and bats to supplement existing sources of information in characterizing baseline conditions for these resources in the proposed site. These efforts will involve a combination of survey techniques and technologies for the identification of species, quantification of relative abundance, and tracking of spatiotemporal patterns in occurrence and will include:
    - [redacted]
    - [redacted]

- [redacted]

5.2 Species at risk

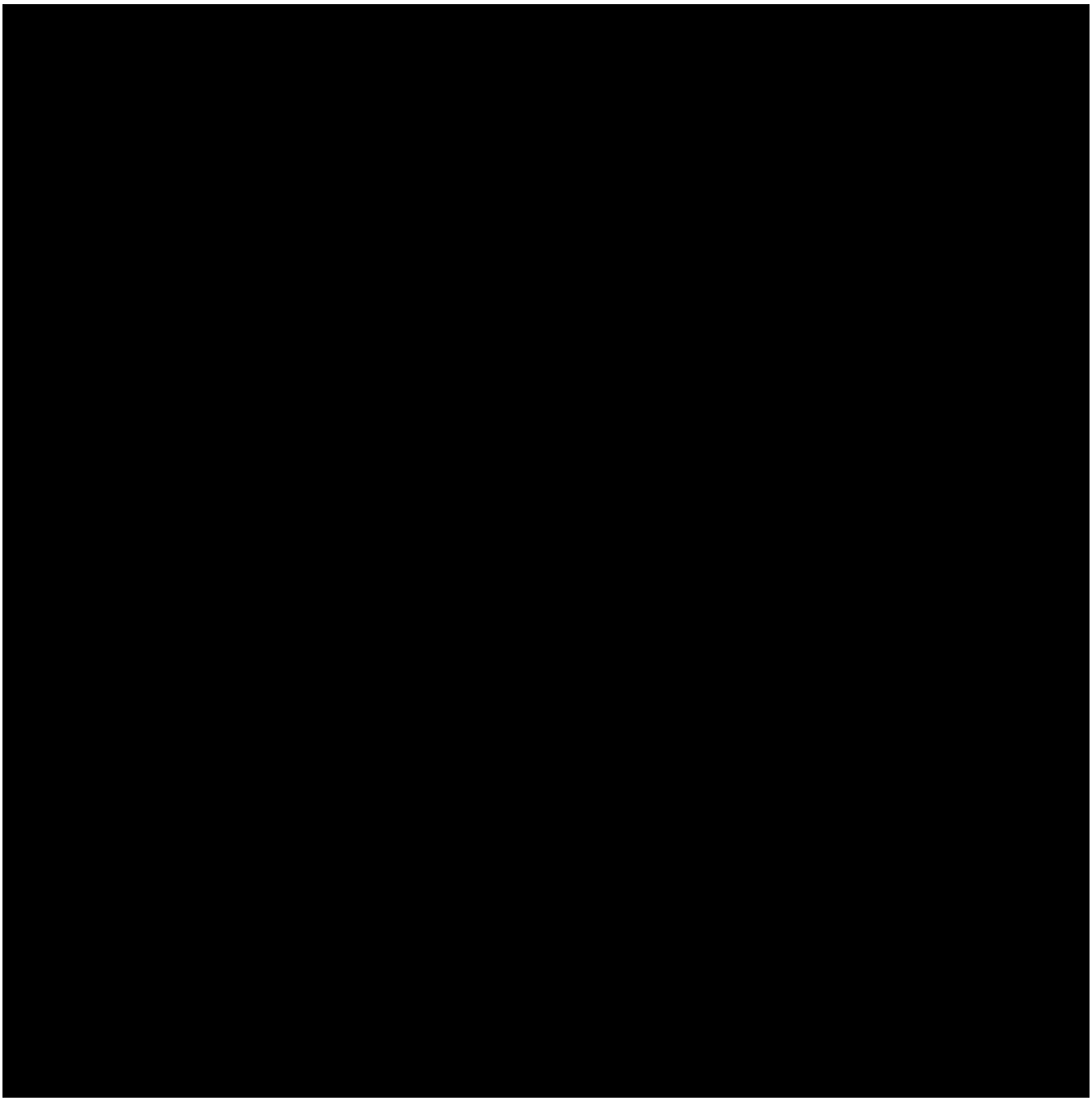
Describe which species the Developer believes to be of greatest concern and why.

- Birds with greatest vulnerability to collision:
    - Gulls, jaegers, and the northern gannet (*Morus bassanus*)
- Federally listed bird species (threatened or endangered) that have the potential to pass through the Project Area:
    - Roseate tern (*Sterna dougallii*)
    - Piping plover (*Charadrius melodus*)
    - Red knot (*Calidris canutus*)
- Bat species that occur most commonly in the offshore environment:
    - Eastern red bat (*Lasiurus borealis*)
    - Hoary bat (*Lasiurus cinereus*)
    - Silver-haired bat (*Lasionycteris noctivagans*)
- Other bat species of interest in the Project Area:
    - Indiana bat (*Myotis sodalis*)
    - Northern long-eared bat (*Myotis septentrionalis*)

5.3 Potential impacts/risks and mitigation measures by project phase

The table below should list the potential impacts and mitigation measures to understand and minimize the Project's risk to birds and bats. At a minimum this should include the steps the Developer will pursue to minimize risk to birds and bats (e.g. lighting), and identification of technological approaches to assess impacts or any Proposals for other research or mitigations relating to birds or bats planned or under consideration at this time.

[redacted]



5.4. Monitor for impacts during each phase

Describe how potential impacts will be monitored on birds and bats during each phase of physical work for the Project (site assessment, construction, operation, and decommissioning) to inform mitigation planning for later phases of the Project as well as for future Projects.

- Attentive Energy will design and conduct pre- and post-construction studies that will yield statistically robust, standardized data on collision mortality for birds and bats during Project operation. While there remain to be any industry-wide standards for measuring collision mortality in the offshore environment, Attentive Energy will explore the use of best-available technologies, such as thermal cameras and impact sensors, and will remain engaged with the E-TWG, ROSA, RWSC, and other research partners to stay current with research efforts conducted by others and new, more effective/standardized approaches that could be implemented to monitor for collisions. If these assessments suggest additional mitigation measures for birds and bats should be employed, this EMP will be updated.

5.4.1 Pre/Post monitoring to assess and quantify changes

Describe how changes to environmental resources will be quantified using statistically sound methods.

- Pre- and post-construction monitoring will be designed in such a way that improves our collective understanding of the impacts of offshore wind energy development on birds and bats, including identifying specific questions and taxa on which to focus monitoring efforts for the proposed Project, or in relation to broader regional efforts to assess variation between sites and understand cumulative impacts for sensitive species.
- Monitoring will, to the extent practicable, use appropriate study designs and methodologies to effectively analyze risk prior to construction and evaluate impacts during construction and operation by testing hypotheses and helping to assure statistical power for meaningful data analysis.
- Outside expertise will, if practicable, be consulted during study design and data analysis processes.
- Avian and bat collision and abundance monitoring will be designed in consultation with stakeholders, external experts, and regulatory agencies.
- It is expected that existing information will be augmented with pre-, during, and post-construction monitoring to assess potential impacts to the presence and/or abundance of priority species and species groups, e.g., gannets.
- [redacted]
- A collision risk assessment will be completed prior to construction. If this risk assessment suggests mitigation measures for birds and bats should be employed, this EMP will be updated.
- Monitoring plans will be informed by discussions with the E-TWG and RWSC bird and bat subcommittees.

5.4.2 Address data gaps

Describe how data gaps will be addressed.

- Attentive Energy will work with stakeholders, including regulatory agencies and local groups, in the design phase of the Project to identify data gaps to be addressed through surveys or permitting applications.

[redacted]

5.5 Strategies for developing alternate protocols

Describe the process for determining when mitigation strategies are insufficient and under what conditions they might elect to rehabilitate or restore impacted birds and bats in an alternative location.

- As necessary, Attentive Energy will explore this further in consultation with the E-TWG, regulatory agencies and relevant stakeholders.
- Attentive Energy will use bird and bat monitoring data to assess the effectiveness of its mitigation strategies in consultation with the E-TWG and relevant regulatory agencies and stakeholders. Attentive Energy is committed to the restoration of resources for bats and birds in alternative locations proactively, to better ensure the goal of “no net loss of biodiversity” is met. [redacted]

6. Proposed Mitigation of Impacts to Fish, Invertebrates and their Habitats

6.1 Baseline characterization

Describe what is known about the proposed site in terms fish and invertebrate assemblage, and temporal and spatial variations in fish, invertebrates and their habitats at the proposed site. The use of collaborative monitoring models with the fishing community is encouraged to develop trusted baseline data.

6.1.1 Available information

Describe key existing literature and datasets that are available for baseline characterization.

- Public data sources are suitable for characterizing benthic habitat and fisheries resources in the Project Area, including:
    - The Fish and Fisheries Study for the New York State Offshore Wind Master Plan (NYSERDA 2017a);
    - The National Marine Fisheries Service Essential Fish Habitat Mapper (NMFS 2022a) and NMFS EFH source documents (NMFS 2022b);
    - The Greater Atlantic Region ESA Section 7 Mapper (NMFS 2022c);
    - Analysis of Multibeam Echo Sounder and Benthic Survey Data for the New York State Offshore Wind Master Plan (NYSERDA 2017b);
    - NOAA National Centers for Coastal Ocean Science and BOEM Comprehensive Seafloor Substrate Mapping and Model Validation in the NYB (Battista et al. 2019);
    - NOAA National Centers for Coastal Ocean Science and Coastal Monitoring and Assessment: A Biogeographic Assessment of Seabirds, Deep Sea Corals and Ocean Habitats of the NYB: Science to Support Offshore Spatial Planning (Menza et al. 2012)

6.1.2 Data collected

Describe data collected, or will be collected, to support baseline characterization.

- Attentive Energy will commission benthic sampling that will cover the entire Lease Area and export cable routes that will build upon previous comprehensive benthic surveys carried out by NOAA's National Center for Coastal Ocean Science. These sampling efforts will include the collection of grab samples, sediment profile imagery, and plain view imagery. Samples will be analyzed for sediment grain size distribution and macrofaunal composition and abundance.
- Attentive Energy will conduct geophysical, benthic habitat (through geophysical interpretation), and geotechnical surveys across the entire Lease Area and export cable route.
- Pending regulatory approval, Attentive Energy will conduct a demersal otter trawl survey in the Lease Area during pre- and post-construction periods that would collect abundance and length data from demersal fish and invertebrates.
- Pending regulatory approval, Attentive Energy will conduct a ventless trap survey in the Lease Area during pre- and post-construction periods that would collect abundance and length data from structure-associated fish and invertebrates.

6.2 Species at risk

Describe which species the Developer believes to be of greatest concern and why.

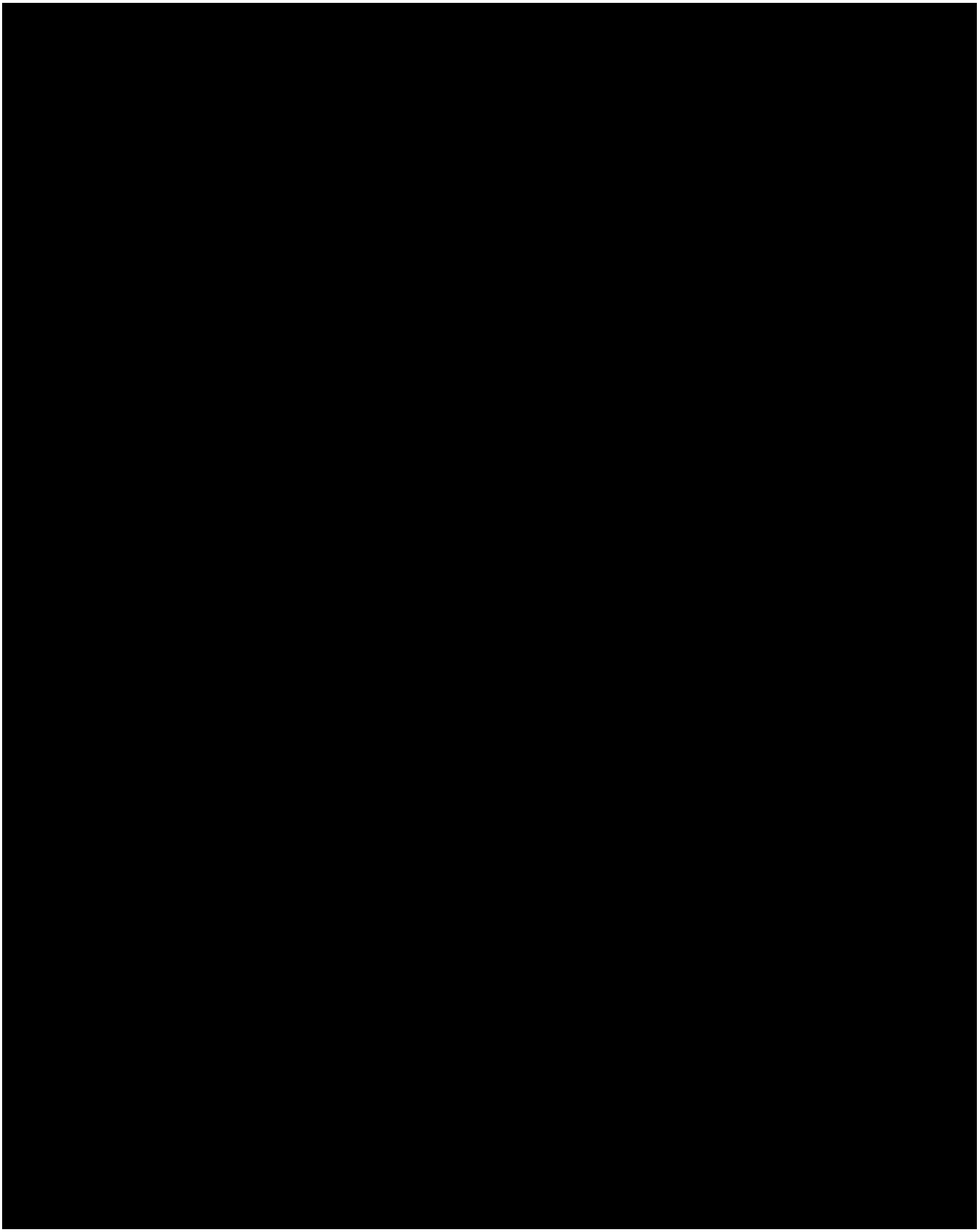
- Attentive Energy acknowledges that fish and invertebrate species of interest are categorized into three groups base on their regulatory status: 1) species that are managed under the Magnuson-Stevens

Fishery Conservation and Management Act (MSA); 2) species that are listed under the Endangered Species Act (ESA); and 3) non-game invertebrate and fish species that are important, as prey or biogenic habitat, for other fish and wildlife species.

- Attentive Energy recognizes that benthic habitat is a fisheries resource that is central to the identification of essential fish habitat (EFH) (BOEM 2019).
- 32 species of fish and invertebrates have designated EFH in the Lease Area.
    - Designated EFH for 21 non-migratory managed species including finfish, sharks (Selachimorpha), and skates (Rajidae), and invertebrates, as well as 11 highly migratory managed fish species, including seven shark species and four tuna species (NMFS 2022a).
    - Three federally listed endangered fish species may occur in the Lease Area:
        - Atlantic salmon (*Salmo salar*);
        - Atlantic sturgeon (*Acipenser oxyrinchus*); and
        - Shortnose sturgeon (*Acipenser brevirostrum*).
    - Five species of fish and invertebrates that may occur in the Lease Area are recognized by NMFS as species of concern:
        - Alewife (*Alosa pseudoharengus*);
        - Atlantic wolffish (*Anarhichas lupus*);
        - Blueback herring (*Alosa aestivalis*);
        - Rainbow smelt (*Osmerus mordax*); and
        - Thorny skate (*Amblyraja radiata*).
    - State-listed fish and invertebrate species that inhabit coastal waters and estuarine waters will be evaluated, as applicable to the export cable route.

6.3 Potential impacts/risks and mitigation measures by project stage

The table below should list the potential impacts to fish, invertebrates, and their habitats and proposed mitigation measures. To this end, this section should describe how the Developers will minimize risk to fish, invertebrates and their habitats (e.g., foundation type, scour protection, cable shielding for electromagnetic fields, construction windows, siltation/turbidity controls, use of dynamic-positioning vessels and jet plow embedment).



6.4 Monitor for impacts during each phase

Describe how potential impacts will be monitored on these types of fish and invertebrates during each phase of physical work for the Project (site assessment, construction, operation, and decommissioning) to inform mitigation planning for later phases of the Project as well as for future Projects.

- Attentive Energy will seek to collaborate with other regulatory agencies and stakeholder groups to identify research needs and opportunities.

6.4.1 Pre/Post monitoring to assess and quantify changes

Describe how changes to environmental resources will be quantified using statistically sound methods.

- Specific questions and focal taxa shall be chosen for the Project either based on site-specific fisheries risk assessment, or in relation to broader regional efforts to assess variation between sites and understand cumulative impacts for sensitive species.
- Monitoring will, to the extent practicable, use appropriate study designs and methodologies to effectively analyze risk prior to construction and evaluate impacts during construction and operation by testing hypotheses and helping to assure statistical power for meaningful data analysis.
- Outside expertise will be consulted during study design and data analysis processes.
- Attentive Energy will seek to collaborate with other regulatory agencies and stakeholder groups to identify research needs and opportunities.
- Attentive Energy will work in collaboration with NMFS, ROSA, and NYSERDA's E-TWG and F-TWG to develop pre-and post-construction monitoring plans.
- Attentive Energy will aim to standardize sampling methods with those used in existing and ongoing surveys to facilitate direct comparisons with the historical baseline and with data collected from other surveys in the region.
- [redacted]
- [redacted]
- Attentive Energy will develop a benthic monitoring plan in consultation with NMFS and NYSDEC. Data collected from the benthic surveys will be analyzed with a BACI model to document habitat disturbance and recovery and evaluate whether there have been significant changes in invertebrate communities resulting from impacts associated with the installation

and operation of the WTGs and export and interarray cables.

- Attentive Energy will conduct drop camera (or other acceptable methodology) optical surveys that emulate the prior optical surveys conducted to characterize the pre-construction benthic communities to support a BACI study design. The survey methodology may be adapted over time based on the results obtained and feedback from various stakeholders. Attentive Energy will consult with NMFS and BOEM prior to conducting surveys and address any agency comments in the survey plan.
- In addition to traditional survey methods, Attentive Energy will explore the use of eDNA sampling to further characterize the fish and invertebrate communities in the Project Area.

6.4.2 Address data gaps

Describe how data gaps will be addressed.

- Attentive Energy will seek to work with stakeholders, including regulatory agencies, to identify data gaps to be addressed through surveys or permitting applications.
- Data gaps exist because the number of samples collected from the Project Area by ongoing surveys is likely to be small and not suitable for detecting smaller-scale impacts to fish, invertebrates, and benthic habitat that may result from Project activities. As described above, the fisheries-independent surveys that Attentive is proposing to conduct would collect data that would be suitable for detecting Project impacts.

6.5 Strategies for developing alternate protocols

Describe the process for determining when mitigation strategies are insufficient and under what conditions they might elect to rehabilitate or restore impacted fisheries in an alternative location or when the provision of compensation of some form may be appropriate.

- As necessary, Attentive Energy shall explore this further in consultation with the E-TWG, regulatory agencies and relevant stakeholders.
- [redacted]

7. Considerations for Subsea and Overland Cables

7.1 Mitigation strategies for subsea and overland cables

This section should describe any additional environmental mitigation strategies for proposed subsea and overland cable routes that support the offshore wind project.

- Attentive Energy's mitigation strategies for subsea cables are outlined in Sections 4.3, 5.3, and 6.3 of this document.
- Attentive Energy has selected the Ravenswood Generation Station, a fully developed fossil fuel-fired generating station located in a highly urbanized area, for the export cable landfall site in state waters. By having the cable make landfall at Ravenswood Generating Station, the Project avoids impacts to coastal wetlands, marshes, beaches, and other sensitive coastal resources.
- As the cable is routed through state waters it also avoids impacts to sensitive nearshore habitats and wetlands.
- [redacted]
- [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]

8. Additional Considerations

8.1 Additional mitigation strategies and EMP refinement

This section should describe any additional mitigation strategies not otherwise described herein that would improve the Plan and reduce impacts on wildlife. In addition, describe how the EMP will be updated and refined based on additional information and stakeholder feedback.

- Attentive Energy will support collaborative research on potential mitigation strategies and best management practices, with other developers, agencies, and stakeholders.
- Attentive Energy is committed to engaging stakeholders frequently and proactively to initiate and maintain constructive two-way dialogue that will allow Attentive Energy to advance and refine all aspects of the EMP.
- Attentive Energy will revise the EMP to reflect any new or updated mitigation strategies that may result from the ongoing communication and collaboration with State and Federal agencies, academic, research, and conservation organizations, and other stakeholders.
- Potential impacts will be reevaluated when the Project Design Envelope is further developed and matured and any modifications or additions to minimization measures will be implemented in the EMP, if necessary.

8.2 Process for updating the EMP

This section should describe how feedback from environmental stakeholders, E-TWG, and other agencies and working groups will be incorporated and updated in the EMP.

- Attentive Energy expects that additional guidance and information will become available throughout the planning and regulatory process and as such will continue to consider its relevance to the EMP at the appropriate intervals.
- Updates to the EMP are intended to reflect the results of iterative exchanges with members of the E-TWG, F-TWG and relevant stakeholders.
- Attentive Energy will update the EMP in a timely manner that reflects changes made based on key regulatory Project deliverable dates.
- Attentive Energy will strive for transparency when updating the EMP and will outline the thought process behind changes made and where stakeholder feedback was taken into account.
- Attentive Energy considers the EMP to be a living document that will be re-evaluated, revised, and improved upon throughout the life of the Project to ensure that this guidance document remains relevant and up to date as the state of the science evolves.

9. Project Decommissioning

9.1 Potential impacts on marine wildlife, birds, bats, and fisheries

This section should describe potential impacts to marine mammals, sea turtles, birds, bats, and fisheries and habitats from decommissioning the project, based on available information and relevant experience (if any).

- Attentive Energy's waste handling processes during decommissioning will focus on re-use or recycling, with disposal as the last option.
- Attentive Energy will collaborate with regulatory authorities and key environmental stakeholder groups to better understand the effects and potential impacts associated with decommissioning.
- Attentive Energy does not anticipate that environmental impacts associated with decommissioning activities will exceed any impacts associated with the maximum design scenario for the construction and O&M of the Project.
- Attentive Energy will use knowledge gained from pre- and post-construction monitoring to better understand the spatial and temporal distributions of marine organisms and habitats and to inform mitigation measures designed to minimize or avoid impacts due to decommissioning activities.
- Attentive Energy will give consideration to habitat formed as a result of offshore Project structures (e.g., OSS and WTG foundations and associated scour protection, export cable protection) and the associated biological communities.
- Attentive Energy will collaborate with researchers, working groups, and stakeholders to determine the impacts of decommissioning activities, and will remain up to date on research related to the decommissioning of offshore wind farms, including those in Europe, and related to the decommissioning of offshore oil and gas platforms.
- Attentive Energy shall use "lessons learned" from the construction, operations, and decommissioning activities of other projects and will incorporate those lessons to the decommissioning plan, where appropriate.

9.2 Approach for decommissioning plan and coordination with stakeholders

This section should describe how a decommissioning plan will be developed to identify and mitigate potential impacts, including coordination with stakeholders, and any elements of its contemplated decommissioning plan that can be identified at this stage.

- Attentive Energy shall decommission the Project in accordance with all necessary laws and regulations and generate a detailed Project-specific decommissioning plan.
- Attentive Energy shall use "lessons learned" from the construction and operations activities and apply them when appropriate to the decommissioning plan.
- Attentive Energy will begin preparation of the detailed, Project-specific decommissioning plan prior to the end of commercial operations and prior to the start of physical decommissioning.
- Attentive Energy will seek input on the detailed, Project-specific decommissioning plan from State and Federal regulatory agencies, environmental and fisheries stakeholders, and local communities and will implement responses to comments, as appropriate, in the final plan.

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