Appendix E

Elements of the Environmental Mitigation Plan

As stated in Section 2.2.9 of the RFP, the Proposer must submit as part of its Proposal an Environmental Mitigation Plan ("Plan"). The Environmental Mitigation Plan should detail, to the extent practical, specific measures the Proposer will take to avoid, minimize, and/or mitigate potential environmental impacts of the proposed Project in the categories identified below. Where specific measures are not known for a specific category of impact at the time of proposing, the Environmental Mitigation Plan must describe how the Proposer will work collaboratively with the State, federal agencies, and other stakeholders to define avoidance, minimization, and mitigation measures. The Plan should provide a roadmap for the environmental work to come and provide a degree of certainty that the Proposer is committed to working collaboratively with stakeholders to develop a cost-effective and environmentally responsible Project.

The mitigation hierarchy should be an organizing principle of the Environmental Mitigation Plan. More specifically, the mitigation hierarchy can help Projects prepare for impacts and aim to achieve no net loss of biodiversity. It involves a sequence of actions to anticipate and *avoid* impacts on biodiversity and ecosystem services; where avoidance is not possible, to *minimize* such impacts; when impacts are predicted to occur notwithstanding the implementation of practical avoidance and mitigation measures, to rehabilitate or *restore* ecosystems; and where significant residual impacts are predicted to remain, *offset* such impacts. The Plan must account for potential adverse impacts of all phases and components of a Project, including pre-construction surveys, construction, operation, and, to the extent practical, decommissioning; and including turbines, cables, substations and, if applicable, collector platforms.

The submitted Environmental Mitigation Plan is a starting point that will necessarily evolve throughout the development process based on feedback from State and federal regulators, and stakeholders. The submitted Environmental Mitigation Plan, and its future iterations, do not supplant or alter the federal regulatory process, rather they become the organizing document for State consultations and stakeholder engagement around the proposed project's development and the associated federal process. While this RFP allows for flexibility to Proposers in devising avoidance, minimization, and restoration/offset measures, some specific measures that will be required of all Projects are identified and must be included in the Proposer's Plan.

The submitted Plan must be comprised of two components, a Narrative component and a Standardized Component using the provided format. Both the Narrative and Standardized Components will be used in the review and scoring the proposal. However, only the Standardized Component will be appended to the contract of selected proposers.

Environmental Mitigation Plan - Narrative Component

Required elements of the Narrative Component of the Plan are set forth below. The Narrative Component should not exceed 20 pages in length and should be submitted as fully searchable PDFs.

E.1 Environmental Mitigation Plan Summary

The Proposer must briefly present its philosophy and approach to avoiding, minimizing, restoring and offsetting the potential environmental impacts of the proposed Project and how the Proposer will use research, data and stakeholder feedback to support decision making with respect to site design, construction, operations and decommissioning.

E.2 Communications and Collaboration

The *New York State Offshore Wind Master Plan*, the *New York State Public Service Commission Order Establishing Offshore Wind Standard Framework for Phase 1 Procurement* issued on July 12, 2018 and the *Order Authorizing Offshore Wind Solicitation in 2020* issued on April 23, 2020 pursuant to Case No. 18-E-0071, and this RFP emphasize the value of stakeholder engagement in the development of offshore wind energy Projects. Further, the Orders require Proposers to work with the State-supported Environmental Technical Working Group ("E-TWG"). Many other stakeholders are engaged in offshore wind energy development. The Proposer must describe how it will identify stakeholders relevant to environmental issues and describe how the Proposer intends to communicate with those stakeholders during survey work, and design, construction, operation and decommissioning of the Project. This description must account for communications with members of the E-TWG and consultations with New York State agencies during the various Project phases.

E.3 Environmental Monitoring and Research Pre-, During- and Post-Construction

Environmental research and peer-reviewed publication of research findings is key to advancing the scientific knowledge of how offshore wind energy development might affect marine ecosystems and wildlife. Proposers are encouraged to publish their own work in scientific journals and to coordinate with scientists and regulators interested in investigating environmental and wind energy-related scientific questions.

Because offshore wind energy development is in early stages in the US, there is little empirical information as to the effects such development may have on ecological communities specific to the New York Bight. Transparency in new research and peer reviewed publication of results bring higher value, allowing others to build on that work. Thoughtfully planned, designed and implemented pre-, during- and post-construction monitoring and research to understand wildlife responses and potential effects from development is key for adaptive management. Further, multiple regional sites working together and coordinating monitoring and research in a consistent manner would bring additional value to the scientific understanding of how development of offshore wind energy is affecting regional resources.

The Proposer must (to the extent possible at this stage) describe how, for large whales (particularly the North Atlantic right whale), other marine mammals, sea turtles, birds, bats, fish and invertebrates, it plans to conduct scientifically sound, statistically rigorous studies to accomplish the following:

1. Establish baseline data on the presence of these types of wildlife within the area of the proposed Project (including areas where Project-related vessels would travel to reach the Project area);

2. Assess and quantify (to the extent practical) changes attributable to Project activities; and

3. Monitor for impacts on these types of wildlife 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.

In the event that these activities cannot be clearly defined at this stage, the Proposer must describe how it will approach these questions and data gaps.

The Proposer must describe how it plans to make environmental data available in accordance with Section 2.2.6 of the RFP.

E.4 Supporting Other Environmental Research

The selected Proposer will be required to coordinate with independent scientists supported by third parties for the purpose of research and publication in peer reviewed journals. This coordination may include the provision of reasonably requested Project data, and access to the Project area to examine environmental sensitivities and/or the impacts of offshore wind energy development on the environment.

The Proposer must describe how such requests will be considered and processed, and any restrictions on data provision or access the Proposer believes may be required to protect trade secrets or maintain site security.

The Proposer may also elect to identify a level of financial commitment that will be appropriated to leverage third-party environmental research funding, including federal or State-supported research, or that the Proposer would be willing to contribute to a general fund for supporting third-party research into relevant ecological communities and the effects of offshore wind energy development. Such financial commitments will be favorably considered in the proposal review process.

E.5 Marine Mammals and Sea Turtles

The development of offshore wind energy poses some concerns about effects on marine mammals and sea turtles, primarily related to the introduction of man-made sounds, changes in ship traffic, and the long-term presence of turbines in the ocean.

Sounds resulting from bottom surveys, ships, and pile driving may risk introducing possible changes in mammal behavior, including effective habitat reduction because of sound avoidance, interruption of life-cycle activities, and injury to hearing. For some marine mammals, low-frequency sounds such as pile driving, if performed in close proximity to an animal, can potentially cause permanent damage to hearing or temporarily make it difficult for the animal to hear predators, prey, and each other.

The Proposer must provide a description of how it will work to understand and minimize the Project's risk to marine mammals and sea turtles, with special attention to highly vulnerable and endangered species such as the North Atlantic right whale. At a minimum this should consist of:

1. A basic description of what is known about the proposed site in terms of marine mammal and sea turtle assemblage, temporal and spatial use of the site, and which species the Proposer believes to be of greatest concern and why;

2. A description of proposed measures to minimize the impacts of sound on marine mammals and sea turtles during all phases of Project development. This should include, at a minimum:

    a. Anticipated pre- and post-construction survey techniques to establish an ecological baseline and changes to that baseline within the Project site;

    b. Minimum size of exclusion zone intended to be monitored during geophysical surveys and construction;

    c. Planned approaches to understanding marine mammal and sea turtle presence and absence within the 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.);

    d. Proposed temporal constraints on construction activities and geophysical surveys with noise levels that could cause injury or 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

    e. Proposed equipment and technologies the Proposer would use to reduce the amount of sound at the source, if any.

3. A description of how the Proposer will seek to minimize the risk of ship strikes through timing, speed restrictions (e.g., stakeholders have suggested speed restrictions of 10 knots during time periods with high densities of species of concern), use of shipping lanes, and conformance to the National Oceanic and Atmospheric Administration guidance to avoid ship collision with whales (https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-ship-strikes-north-atlantic-right-whales).

E.6 Birds and Bats

Offshore wind energy has the potential to adversely impact birds and bats during siting, construction, and operation. Impacts include direct mortality from collisions with wind turbines and other structures, habitat loss, displacement, and sensory disturbances from sound and light. Since offshore wind is a new industry in the Atlantic and all potential impacts are not known, it is critical that current use by birds and

bats is well understood before construction and use and impacts continue to be monitored during and post- construction so that unexpected impacts can be mitigated for.

The Proposer must provide a description of how it will work to understand and minimize the Project's risk to birds and bats. At a minimum this should include:

1. A description of what is known about the proposed site in terms of bird and bat assemblages, temporal and spatial use of the site by key species, and which species the Proposer believes to be of greatest concern and why;

2. The planned approach that the Proposer will use to evaluate risks to birds and bats generally, and those of greatest concern specifically;

3. Steps the Proposer will pursue to minimize risk to birds and bats (e.g. lighting); and

4. 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.

E.7 Fish, Invertebrates and their Habitats

The principal potential risks of offshore wind energy development to fish, invertebrates and their habitats include possible changes to the seafloor and other habitats, increased sediment levels in the water column, noise and sensory disturbances, and direct harm to fish and invertebrate species from construction equipment. These changes could result in changes in predator/prey relationships, competition between species and changes to fish and invertebrate populations in and around the Project site.

The Proposer must provide a description of how it will work to understand and minimize the Project's risk to fish and invertebrates and their habitats. At a minimum this should include:

1. A basic description of what is known about the proposed site in terms of 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;

2. Identification of fish and invertebrate species the Proposer believes to be of greatest concern and why;

3. The planned approach that the Proposer will use to evaluate risks and impacts to fish, invertebrates and their habitats generally, and the species or habitats of greatest concern specifically;

4. Steps the Proposer will pursue to 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); and

5. Any Proposals for other research or measures taken to reduce risk or impacts to fish, invertebrates or their habitats (e.g., ecosystem or habitat enhancements).

Environmental Mitigation Plan - Standardized Component

The Standardized Component of the Environmental Mitigation Plan generally follows the Narrative component but provides concise and consistent documentation of specific mitigation approaches across selected projects to make comparison by stakeholders more efficient. Some elements within the Standardized Component are pre-populated and required of all Proposers. Proposers must augment these elements to the extent appropriate by addressing the highlighted areas through the addition of mitigation measures they are committing to pursue as part of the proposed project. A complete, stand-alone Environmental Mitigation Plan must be provided in the format below.

Environmental Mitigation Plan

for

[project name]

Version [1.0]

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

with

New York State Energy Research and Development Authority

Albany, NY

Prepared by

[company or joint venture name]

[Address]

[Logos]

[Date]

Record of Revision		
Revision Date	**Description of changes**	**Revision on pages**
[date]	[Original issue]	[page(s)]

Communication Officers, Contact Information, Links		
Name/Title	**Role**	**Contact Information**
[name] [title]	[key role and responsibilities]	[phone and email]

Links to project information: [website, etc.]

Table of Contents

[Add table of contents]

List of Figures

[Add list of figures, if any]

List of Tables

[Add list of tables, if any]

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 environmental impacts.

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).

- The developer shall seek consultation and coordinate with relevant stakeholders.
- The developer shall review existing research and data and seek input from stakeholders regarding data gaps to inform decisions made throughout the Project life cycle.
- The developer shall review and seek input from stakeholders on proposed and conducted survey rationales and methodologies as well as design, construction and operation, and decommissioning plans for the Project.
- To the extent that the timeline allows, pre- and post-construction monitoring shall be designed to improve the understanding of impacts of offshore wind energy development and operations on wildlife.
- [additional Proposer statements, if any]

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.

- [Proposer statements, if any]

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.

- The developer shall seek methods and processes to allow for a two-way flow of information between key stakeholders and developers, specifically highlighting how the developer uses this feedback to inform their decision making.
- The developer shall provide updates to environmental stakeholders in an appropriate manner that would be easily accessed and widely distributed.
- [additional Proposer statements, if any]

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. [Complete Table as Appropriate]

Name/Title	Role/Responsibilities	Contact Information

2.3. Identification of stakeholders

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

- [Proposer statements, if any]

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.

- The developer shall coordinate with the E-TWG (in accordance with Section 12.04 of the Agreement) and stakeholders to address concerns and mitigate impacts to the wildlife and environmental resources.
- The developer shall dedicate Project-specific technical resources to the E-TWG.
- To the extent practicable, the developer shall work with the E-TWG and shall attend E-TWG meetings and workshops
- [additional Proposer statements, if any]

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.

- [Proposer statements, if any]

2.4.3. Communication with other stakeholder and working groups

This should describe any relevant participation with other stakeholder groups that would help inform the EMP.

- [Proposer statements, if any]

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. [Complete Table as Appropriate]

Proposed Outreach Method/Tools	Phase*			
	1	2	3	4
**Phase: 1: Survey/Design; 2: Construction; 3: Operation; 4: Decommission*				

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.

- [Proposer statements, if any]

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.

- [Proposer statements, if any]

3.3. Data availability

This section should describe how data will be made available in accordance with Section 2.2.6 of the RFP

- [Proposer statements, if any]

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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.

- The developer shall seek to explain why identified data types are considered commercially sensitive.
- [additional Proposer statements, if any]

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.

- [Proposer statements, if any]

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.

- [Proposer statements, if any]

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.

- [Proposer statements, if any]

4.1.2. Data being collected

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

- Observations of all right whales and dead, entangled, or distressed marine mammals shall be communicated to federal authorities as soon as is practicable, and no later than 24 hours after occurrence
- [Proposer statements, if any]

4.2. Species at risk

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

- [Proposer statements, if any]

4.3. Potential impacts and mitigation measures by 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 to 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. [Add potential impacts and proposed mitigation measures as appropriate]

Potential Impacts	Proposed Mitigation Measures[1]	Phase*			
		1	2	3	4
Underwater noise impacts from geophysical survey equipment	• Exclusion, clearance, and monitoring zones shall be maintained around noise-generating activities to help measure and mitigate potential noise-related effects on marine mammals • Monitoring during noise-generating activities shall be done through an integrated monitoring approach, including the use of PAM, NMFS-approved PSOs, and other proven technologies, as appropriate, to the extent practicable and in compliance with federal regulation • Noise generating geophysical survey work shall not commence after dark or at other times of low visibility that would prevent sufficient monitoring of exclusion zones, to the extent compatible with practicability and worker safety	X	X	X	
Underwater noise impacts from construction and installation activities	• The developer shall seek to use noise attenuation technologies to reduce sound from pile driving of foundations (if such methods are used) • Monitoring during noise-generating activities shall be done through an integrated monitoring approach, including the use of PAM, NMFS-approved PSOs, and other proven technologies, as appropriate, to the extent practicable • The developer shall not commence impact pile driving for foundation installation during poor visibility conditions such as darkness, fog, and heavy rain, unless an alternative mitigation monitoring plan that does not rely on visual observation has been determined to be effective, to the extent compatible with practicability and worker safety		X		
Vessel strikes on marine mammals	• The developer shall ensure that all vessel personnel are trained regarding animal identification and protocols when sightings occur • The developer shall provide reference materials on board all project vessels for identification of marine mammals and sea turtles	X	X	X	X
Electromagnetic Fields (EMF), resulting in potential disturbance to marine mammals/sea	• The developer shall use proper shielding to reduce EMF impacts. • The developer shall conduct EMF modeling and assessments to identify potential mitigation requirements.	X	X	X	

Potential Impacts	Proposed Mitigation Measures[1]	Phase*			
		1	2	3	4
turtles and/or their prey resource					
**Phase: 1: Survey/Design; 2: Construction; 3: Operation; 4: Decommission*					

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.

- The developer shall seek to collaborate with other regulatory agencies and stakeholder groups to identify research needs and opportunities.
- [additional Proposer statements, if any]

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 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, if practicable, be consulted during study design and data analysis processes.
- [Proposer statements, if any]

4.4.2. Address data gaps

Describe how data gaps will be addressed.

- The developer shall 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.
- [additional Proposer statements, if any]

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, the developer shall explore this further in consultation with the E-TWG, regulatory agencies and relevant stakeholders.
- [additional Proposer statements, if any]

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.

- [Proposer statements, if any]

5.1.1. Available information

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

- [Proposer statements, if any]

5.1.2. Data collected

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

- [Proposer statements, if any]

5.2. Species at risk

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

- [Proposer statements, if any]

5.3. Potential impacts/risks and mitigation measures by project stage

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. [Add impacts and mitigation measures as appropriate]

Potential Impacts	Proposed Mitigation Measures	Phase*			
		1	2	3	4
Collision risk to marine birds and bats	• To avoid and minimize attraction- and disorientation-related impacts to birds and bats, artificial lighting on offshore wind projects shall be reduced to the extent practicable while maintaining human safety and compliance with FAA, USCG, BOEM and other regulations. • Monitoring shall be conducted to determine if there is a need for perching-related deterrents to reduce attraction and minimize potential perching and loafing opportunities for birds. • Physical deterrents to perching (e.g. such as spikes and netting or other best available technology) shall be implemented if there is demonstrated risk at the site (e.g., perching and roosting on infrastructure is a common occurrence) and to the extent that they do not represent a human safety hazard.		X	X	

Habitat impacts, including breeding and nesting areas	• Siting and construction of nearshore and onshore project components for offshore wind farms (including but not limited to nearshore export cable routes, landfall sites, onshore cable routes, and onshore substations) shall be conducted in such a way as to avoid or minimize the loss or alteration of bird and bat habitat, as well as avoid or minimize disturbance and direct and indirect effects to bird and bat populations and their prey. Specifically, onshore infrastructure (i.e., landfall site, cable routes, substations) and development activities should 1) maximize the use of previously developed or disturbed areas, and 2) avoid unique or protected habitats, as well as habitat for key species, where feasible.		X	X	X
	•				
*Phase: 1: Survey/Design; 2: Construction; 3: Operation; 4: Decommission					

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.

- [Proposer statements, if any]

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 shall be designed in such a way that it improves 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.

- [additional Proposer statements, if any]

5.4.2. Address data gaps

Describe how data gaps will be addressed.

- The developer shall 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.
- [additional Proposer statements, if any]

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, the developer will explore this further in consultation with the E-TWG, regulatory agencies and relevant stakeholders.
- [additional Proposer statements, if any]

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.

- [Proposer statements, if any]

6.1.2. Data being collected

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

- [Proposer statements, if any]

6.2. Species at risk

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

- [Proposer statements, if any]

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). [

[Add potential impacts and proposed mitigation measures as appropriate]

Potential Impacts	Proposed Mitigation Measures	Phase*			
		1	2	3	4
Micro-siting conflicts with habitats and fishery resources	• The developer shall seek input from regulatory authorities, the fishing industry, and maritime industry to locate foundations and cable routes in the least impactful manner that is practicable.	X			
Temporary, alteration of the seabed and localized increases in noise and turbidity	• The developer shall seek to use noise attenuation technologies to reduce sound from pile driving of foundations (if such methods are used)	X	X	X	X

Long-term changes to seabed and habitat	• The developer shall, to the extent possible, avoid sensitive benthic habitats.	X	X	X	X
EMF Impacts	• The developer shall use proper shielding to reduce EMF. • The developer shall conduct EMF modeling and assessments to identify potential mitigation requirements.		X	X	
Cable burial	• The developer shall bury export cables to an appropriate minimal depth to reduce exposure risk. If depth cannot be reached, the developer shall add protective materials over the cable.				
**Phase: 1: Survey/Design; 2: Construction; 3: Operation; 4: Decommission*					

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.

6.4.1. Pre/Post monitoring to assess and quantify changes

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

- Ideally, 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, if practicable, be consulted during study design and data analysis processes.
- The developer shall seek to collaborate with other regulatory agencies and stakeholder groups to identify research needs and opportunities.
- [additional Proposer statements, if any]

6.4.2. Addressing data gaps

Describe how data gaps will be addressed.

- The developer shall seek to work with stakeholders, including regulatory agencies, to identify data gaps to be addressed through surveys or permitting applications.
- [additional Proposer statements, if any]

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, the developer shall explore this further in consultation with the E-TWG, regulatory agencies and relevant stakeholders.
- [additional Proposer statements, if any]

7. Project Decommissioning

7.1. 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).

- The developer's waste handling processes during decommissioning shall focus on re-use or recycling, with disposal as the last option.
- The developer shall collaborate with regulatory authorities and key environmental stakeholder groups better understand the effects and potential impacts associated with decommissioning.
- [additional Proposer statements, if any]

7.2. 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.

- The developer shall decommission the Project in accordance with all necessary laws and regulations and generate a detailed Project-specific decommissioning plan.
- The developer shall seek input on the detailed Project-specific decommissioning plan from regulatory agencies, fisheries and marine stakeholders, and local communities.
- The developer shall use "lessons learned" from the construction and operations activities and apply them when appropriate to the decommissioning plan.
- [additional Proposer statements, if any]

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.

- The developer will support collaborative research on potential mitigation strategies and best management practices, with other developers, agencies and stakeholders.
- [additional Proposer statements, if any]

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.

- The developer will continuously evaluate and evolve this EMP so that all the components of the EMP are complete and sufficient.
- The developer 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.
- [additional Proposer statements, if any]