

## Fisheries Technical Working Group (F-TWG) Empire Mitigation Plan Meeting Summary

Tuesday, November 19, 2019 from 2 pm to 5 pm  
NYC Seminar and Conference Center, 71 E 23<sup>rd</sup> St, New York City

Under the New York State Public Service Commission's procurement process, contracts for offshore wind development necessarily entail Mitigation Plans to address the interests of ocean users such as commercial and recreational fishing and environmental stakeholders. On November 19<sup>th</sup>, 2019, the **Fisheries Mitigation Plans** for Empire Wind (Equinor) development was presented to non-developer members of NYSERDA's Fisheries Technical Working Group (F-TWG). **This document outlines the key discussion points during the Empire session as well as input provided to NYSERDA via email following the meeting.** Comments are summarized without attribution to specific individuals. Meeting attendees are referred to as interchangeably in the summary as "stakeholders" and "F-TWG members". The session's discussion goals included:

- Initiate an on-going conversation with the individual project teams about their projects
- Learn about and gain a detailed understanding of the project's mitigation approach
- Share initial advice, comments, and considerations with each of the project teams
- Identify issues for further discussion or to bring back to the full F-TWG

This summary is organized to align with the structure of the meeting agenda (Appendix A). Note this summary is focused on the discussion rather than presentation of Mitigation Plans by developer representatives. Developer presentations are not summarized here. Mitigation plans and presentations from Empire Wind are linked [here](#)).

### Fisheries Mitigation Plan Meeting of November 19<sup>th</sup>, 2019

Attendance: In addition to presenting developer representatives, there were approximately 6 F-TWG members in attendance in the room, 2 NYSERDA staff, and 11 F-TWG members who participated remotely via web/conference call. Two staff from the Consensus Building Institute (CBI), and The Cadmus Group, were also present to provide technical, facilitation, and logistics support.

### Welcome & Introduction

NYSERDA shared that it is seeking input from stakeholders to inform its process and next steps regarding both Sunrise and Empire Wind site-specific topics as well as spatially agnostic topics that connect to future projects as well as other parallel efforts.

As part of NYSERDA's contractual requirements, offshore wind developers must consult with relevant state agencies around fishing, wildlife, and the environment and participate in the Technical Working Groups. The developers will evolve their mitigation plans over the course of their projects and make data collected publicly available where possible.

This meeting was not intended to generate consensus, but instead to gather comments and questions on the mitigation plans. Developer mitigation plans will likely be updated two to three times a year

based on milestones, state and federal guidance, and TWG input. Slides with further detail on NYSERDA's introductory comments are available on the F-TWG website.

The Agenda for the meeting and "Rules of the Road" for the discussion were outlined by the facilitator are available in the Appendix.

## General Feedback

This section summarizes feedback from stakeholders that applies to both mitigation plans and/or in several places throughout the mitigation plans.

### Detail and Specificity

- **Additional Detail in General:** Throughout the mitigation plan, stakeholders requested a greater level of detail. Specific requests are highlighted in the feedback that follows in this document.
- **Similar Projects:** The plan should bring in more lessons from other projects and places.
- **Hypotheses versus Facts:** Regarding rationales provided for specific actions within the mitigation plan, stakeholders highlighted that it should be clearly delineated whether figures and statements are referring developer hypotheses or are referring to data based on scientific studies.
- **Naming of the Plans:** A stakeholder suggested finding a new acronym besides FMPs for Fisheries Mitigation Plans as FMPs often refer to Fisheries Management Plans.

### Next Steps

- **Meeting Summaries** and presentations from both mitigation plan meetings will be available on the F-TWG website.
- **Mitigation Plan Updates:** Developers will be asked to red-line changes they make to the plan to show how they respond to stakeholder feedback. The F-TWG will also discuss how the mitigation plan review and update process can continue moving forward (e.g. update two-three times a year based on major milestones). Stakeholders shared that the frequency of updating and communicating on mitigation plans should balance level of effort and value. An appropriate level may involve communicating updates once per year. A first step could involve making updates based on this discussion.
- **Future Mitigation Plans:** NYSERDA will also undertake a broader assessment of mitigation plans to understand how they can be standardized, including across states.

## Empire Wind Mitigation Plan

The sections that follow provide key takeaways from the discussion associated with each section of the mitigation plan presentation for Empire Wind.

### Section 1: Fisheries Mitigation Plan Summary

- **Future Wind:** Stakeholders raised comments regarding the specific layout of the wind farm proposed lease area. For example, ensuring that future wind projects are taken into account. Developer representatives responded that they are working with BOEM on this point.
- **Gravity-Based Foundations:** Stakeholders inquired about further details and dimensions of the gravity-based foundations.

- Developer representatives responded that the size varies based on several considerations. A conservative size gravity footprint for a 10MW machine would have a 121 ft. diameter; and an 18 MW would have a 180 ft. diameter. These numbers reflect developer corrected values from what was presented at the meeting. Regarding designs, the developer representatives shared that it would depend on the designs that suppliers provide, and it will vary by manufacturer.
- **Three Cables:** A stakeholder asked a specifications question on the need for three cables rather than one, given that having a single cable for the entire lease area could help minimize impacts.
  - Developer representatives responded that having one cable would be the ideal but would not work in practice as there would not enough capacity on various grid points to support capacity of the wind farm lease area. This creates a need to divide capacity to different areas.
- **Cable Construction:** A stakeholder inquired whether all the cables for the entire lease area will be constructed at once or over time and developer representatives clarified that they will be phased in over time, with the Gowanus cable as the first given the priority focus on Empire Wind Project.
- **Cable Design:** A stakeholder asked about whether there are cable design requirements (e.g. how shallow to avoid overheating, cable depth).
  - Developer representatives responded that factors such as ground conditions, cable properties, and the designs of nearby cables all influence this question. Equinor is doing surveys to help us understand these properties and needs better. Specifically, 6 ft is target area depth for cable burial in areas where there is fishing, for input and export cables. In areas that cross anchorages, there is a minimum of 15 ft.
- **Coexistence:** Referring to a mention of “coexistence” in Section 1, stakeholders highlighted that it is likely not possible for all commercial fishing to continue in lease areas. A stakeholder shared an example that insurance companies may decide not to insure fishing activity through certain passages.
- **Feedback from stakeholders on this section received after the meeting**
  - 1.1 To premise the fisheries mitigation plan on the belief that the fishing industry and offshore wind energy industry can be compatible and can co-exist is beginning from a position that is likely not true for most fisheries and vessels operating in the NY Bight. It is likely that the economic constraints of the offshore wind energy industry and the spatial operational needs of the mobile gear commercial fishing industry just do not align. Those that believe (wish) the fishing industry and offshore wind energy industry can be compatible and can co-exist tend to discount the experience of the fisherman because they have never had the experience of operating a fishing vessel and tend to discount that experience as less valid than their beliefs.
    - Those in the wind energy industry and the regulators charged to procure offshore renewable energy tend to give greater credence to information supporting co-existence and the commonly held beliefs by those with a stake in the offshore renewable energy industry being a success, even when the information or beliefs come from the weakest basis.

- Is the Project Team prepared to offset the impacts of large-scale fisheries losing complete access to the WEA if the belief that the fishing industry and offshore wind energy industry can be compatible turns out not to be true?
- Equinor Wind does not have to restrict fishing activities within the operational wind farm for there to be a complete loss of access for fishing industry vessels. During the multi-decade operations phase of the WEA the risk to life and property of a vessel working within a WEA will be borne by the fishing industry alone. Already the most dangerous industry in the United States many vessel operators will simply determine that the risk to the vessel and crew is inhibitory. The NMFS has already declared that research vessels will not conduct research where their vessels must come closer than 1nm to WEGs.

## Section 2: Communication and Collaboration Approach

- **Roles:** A stakeholder suggested that the Mitigation Plan provide more clarity on the difference in specific roles for the Communication Officers listed in the plan.
- **Confidentiality:** Regarding the engagement approach, fishing industry representatives stated openness to using confidentiality agreements.
- **Industry Contacts:** In section 2.3, in terms of industry contact lists, stakeholders suggested ensuring that state and agency working groups are incorporated where appropriate. Additionally, State Fisheries Commissions were suggested by a stakeholder as an additional type of organization to connect with.
- **Communication:** Stakeholders shared that the articulation of this section on communication should reflect that communication runs bidirectionally. Specifically, stakeholders stated that currently the Mitigation Plan focuses on outreach of developer representatives to fishing industry representatives, and that it could be more explicit about the roles of the communication Officers in terms of taking feedback from the fishing industry back to Equinor.

## Section 3: Monitoring and Research Pre-, During, and Post-Construction

- **Comprehensive Plan:** Regarding monitoring, developer representatives clarified that they currently do not have a comprehensive plan given the project stage and stated an intention to work with fishery industry and fishery scientists to further develop the monitoring approach.
- **Regional Monitoring:** Developer representatives also clarified a preference to focus on regional monitoring through Responsible Offshore Science Alliance (ROSA), while also supporting project-specific monitoring and research.
- **Baseline:** Stakeholders inquired how research can be conducted if a baseline has not yet been determined.
  - Developer representatives responded that engaging with broader stakeholders is necessary to progress on this front.
  - Stakeholders agreed that broad involvement is necessary but emphasized a need to begin monitoring now rather than after construction.
- **Potential Impacts:** Regarding section 3.5.2, stakeholders highlighted that the fourth bullet does not provide a guarantee or response to addressing potential impacts that are identified through monitoring.

## Section 4: Supporting Other Research

- **Vessels:** Stakeholders outlined that to the extent practical, all fisheries research should be conducted from fishing vessels (including for internal Equinor research), and language to that effect should be incorporated into the Mitigation Plan.
  - Stakeholders shared that while it can be hard to assess impacts of development given that there are other activities affecting resources, it is still important to conduct research.
  - Developer representatives clarified that research contributions to organizations like ROSA are additional and separate from Equinor's own internal monitoring activity.
- **Feedback from stakeholders on this section received after the meeting**
  - 4.1 To suggest the study of fishing feasibility (by technique) within an operational wind farms without mentioning risk shows the desire to declare fishing as feasible if possible. The risk to life and property (as mentioned is borne by the vessel owner, crew and insurer alone) increases as weather, sea state, visibility, humidity, crew fatigue, biomass abundance and other operational factors deteriorate. The study of the spatial operational needs of a fishing vessel under differing conditions will require expertise in many disciplines and complex modeling. It will be the case for many fisheries that the risk is just not worth fishing within the WEA and there will simply be a total loss of access for these fisheries.
    - All data collected from the lease area should be made publicly available after the site enters operations. At this point the data collected from the lease area is no longer business sensitive.
  - 4.3 As per data collected comments on section 4.1.

## Section 5: Proposed Mitigation of Impacts to Benthic/ Fishery Resources

- **Available Data:** Stakeholders asked what data is currently shared and in what forms. Developer representatives shared that a lot of data is available for public download but needs to have more context attached and ultimately be stored in the right places. The NYSERDA website and other collaborative organizations such as Northeast Regional Ocean Council (NROC) and Mid-Atlantic Regional Ocean (MARCO) were shared potential hubs to store data to ensure accessibility and transparency.
- **Surface protection:** Stakeholders recommended that more detail be added to the description of what materials would be used for surface protection. Specifically, that there may be instances in which there is a legal requirement to use a concrete mattress, and that in other instances, Equinor would consider utilizing another material.
- **Operational Noise:** Stakeholders stated that this section should mention the potential impacts of operational noise.
- **Cable Depths:** Regarding cable depths, stakeholders recommending adding to the Mitigation Plan a point on maintaining the depth of cables over time.
- **Cable Types:** Stakeholders suggested that adding further explanation of the different types of cabling that exist would be helpful context. Stakeholders also suggested that in general, adding more context in lay-terminology will make information more accessible.
- **Cable Numbers:** Stakeholders emphasized the need to minimize the number of cables coming from various projects. For instance, could multiple projects share a final, single cable to land.

More generally, the discussion focused on a need to adapt energy infrastructure to this new source of power. Specifically, a question at hand is how to maximize flexibility of the transmissions system without having to build completely new and different onshore infrastructure. In the past for example, when a utility identified a load pocket that it could not serve, it would take over approximately 12 years to go through the process simply to permit that change.

## Section 6: Proposed Mitigation of Impacts to the Recreational and Commercial Fishing Industry

- **Restrictions:** Stakeholders inquired whether Equinor intends to apply for restrictions on fishing in the wind farms.
  - Developer representatives clarified that there is not an intention to apply for restrictions to fishing in the operational wind farms other than potential safety zones at sensitive structures.
- **Turbine spacing:** Stakeholders articulated that 0.65 nautical mile spacing would not meet the needs of many stakeholders. Some stakeholders articulated that 2 nautical miles between turbines has been their request and that insufficient spacing creates significant safety and other concerns.
  - Developer representatives clarified that there will be **safety zones** during construction where cables go within a 12-mile area from the shore where US Coast Guard has jurisdiction to implement this, and that Equinor will work with the industry on managing these and safety zones outside 12 nautical miles.
- **Coordination Centers:** Developer representatives described “coordination centers” that would support coordinating with relevant stakeholders during preparation for construction and operations. Stakeholders requested that the plans for coordination centers be added to the mitigation plan.
  - Developer representatives agreed to articulate the plan for coordination centers in the mitigation plan.
- **Physical Disturbance:** Stakeholders expressed that more detail is needed in section 6.1 regarding physical disturbance as well as the cable burial plan.

## Section 7: Project Decommissioning

- **More Detail:** Developer representatives shared that more detail in this section is forthcoming, in part per BOEM’s requirements, and that over time existing windfarms elsewhere will provide more guidance on the best approaches.
- **Restoration Plan:** Stakeholders highlighted that the near-term would still be an appropriate time to start planning for decommissioning, potentially including something along the lines of a restoration plan.

## Section 8: (Optional) Fisheries Compensation Plan

- **Collaboration:** Developer representatives emphasized that Equinor’s priorities are on prevention, and mitigation, and would like to seek a collaborative approach between the developer, fishing, and regulatory industries.

- **Financial Compensation:** Stakeholders shared it is not too early to assume a need for financial compensation, and that on the contrary it will likely be needed and should be planned for starting now.
- **Broad Collaboration:** Some stakeholders highlighted that the compensation plan should likely be a broad effort rather than developer by developer, state by state, and fishing industry by fishing industry. Broader efforts that may include other states and potential federal representatives should be considered.
  - Other stakeholders disagreed and suggested that a broad collaborative could help set a framework but that there will be elements of compensation plans that are more case by case (e.g. fishery by fishery, state by state, developer by developer).
- **Feedback from stakeholders on this section received after the meeting**
  - 8.1 It is not too early to assume the need for and quantify financial compensation measures when one doesn't start with the indefensible premise that the fishing industry and offshore wind energy industry can be compatible and can co-exist. When this baseless premise is discounted the need to quantify financial compensation measures is clear.
  - 8.2 Empire Wind Project Team's failure to detail an approach to developing a compensation plan will lead to further mistrust that the team is capable of good faith fishery mitigation efforts.
  - 8.2.2 Should financial compensation be required; the fishing industry supports a process for identifying recipients and values that is open to the public and may be managed by an independent third-party without confidential agreements where payments for the loss of a public resource exists.



## Appendix A: Agenda

<b>2:00</b>	<b>Welcome and Introductions</b>
<b>2:10</b>	<b>Overview of the Day, Goals and Ground rules</b>
<b>2:20</b>	<b>Brief Overview of Procurement Process, Authorities and Jurisdictions, and Process from here, <i>NYSERDA</i></b>
<b>2:30</b>	<b>Overview of the Project, Empire Project Team</b>
<b>2:45</b>	<b>Present each major section</b> <ul style="list-style-type: none"><li>• Project Team presents key points of each section</li><li>• F-TWG ask questions, provides advice and considerations</li><li>• Facilitator summarizes key points at end of each</li></ul>
<b>3:30</b>	<b><i>Brief Break</i></b>
<b>3:40</b>	<b>Continue Review and Discussion of Sections</b>
<b>4:45</b>	<b>Summary and Next Steps, Facilitator and NYSERDA</b>
<b>5:00</b>	<b>Adjourn</b>



## Appendix B: Rules of the Road for TWG-Project Dialogue

This is the first, but by no means the last, dialogue between the F-TWG and specific project teams. Unlike the typical F-TWG meeting where discussions focus on key issues across projects, these discussions are meant to be project specific. Thus, to set expectations and parameters about project specific dialogue, the following rules of the road are suggested.

- Only non-developer F-TWG members will attend (but for each project team).
- A meeting summary without attribution will be developed from the dialogue and made available to all F-TWG members and posted on the F-TWG website.
- The F-TWG is a common forum to learn together about project details and to provide individual advice and comments to project teams. The F-TWG is not expected to develop collective advice to the projects.
- The project teams are not required to agree with nor act on the advice or comment of F-TWG members, but are expected to take it seriously, consider the merits, act when possible, and explain why key advice was not taken.
- The project teams should understand that while these meetings are not public there is no guarantee of confidentiality and the meeting summary will be made public. Thus, project teams should be mindful when / if they choose to share proprietary data.
- The dialogue with individual project developers is expected to be on-going and no one single meeting is intended to serve as the sole forum or time for dialogue.
- Through individual project discussions, the F-TWG may identify common themes and issues that need to be discussed across projects and these may be brought to future F-TWG meetings where all members, including developers, are present.