MA Fisheries and Habitat Working Groups on Offshore Wind

Virtual Joint Meeting, September 27, 2024

MEETING SUMMARY

Meeting slides are available on the Fisheries Working Group on Offshore Wind website.

Welcome and State Updates

Dan McKiernan, Director of MA Division of Marine Fisheries (DMF), welcomed attendees. He thanked BOEM for acknowledging the Commonwealth's comments during the Gulf of Maine planning process and making substantive changes to proposed wind energy areas. He noted that Justin Bopp has moved on from his position as the DMF Offshore Wind Specialist but is hoping to replace the position. Mr. McKiernan thanked both Working Groups for joining today to talk about the challenges of bringing energy to shore and connecting to the existing electricity grid. Alison Brizius, Director of MA Coastal Zone Management (CZM) also welcomed all. Alison noted that the comment period for the MA Offshore Wind Strategy was extended to October 5 and encouraged all to submit comments.

Patrick Field, CBI facilitator, noted that the agenda would focus on three presentations regarding transmission.

Transmission Permitting by the Commonwealth

Mike Judge, Undersecretary of Energy, MA Executive Office of Energy and Environmental Affairs, noted that he would focus on the state permitting process for transmission lines that cross into state waters and onto shore. He noted that the broader permitting and siting reforms in the legislature are a top priority of the Healey administration.

Massachusetts has established legally binding goals for clean energy. This includes decarbonizing buildings, transportation, and increasing the generation of electricity with renewable energy. It is estimated that the Commonwealth needs 23 GW of offshore wind by 2050 to help meet those goals. Mr. Judge noted that there are many challenges with the existing permitting process. The Governor established a Commission to propose reforms. The Commission's recommendations, now in legislation, cover several issues but overall, the intent is consolidated, streamlined state permitting. The goal is to reduce permitting times to 15 months. The proposed changes also include the first ever mandatory community engagement in the process. The current status is that both the House and Senate have passed similar versions. Governor has included her preferred language in the end of year supplemental budget.

The following questions (Q) and comments (C) were shared by the working group:

Q: How are Federal and State acknowledged Tribes incorporated into project permitting and scoping?
A: Tribes must be part of the groups that would have to be engaged as part of the pre-filing engagement process. Tribes can also intervene in the process if they can show they are an affected party and could apply for financial assistance for lawyers/extra witness. The EEA Office of Environmental Justice is developing guidance on how to engage with a lot of community groups and Tribes. Board would look very fondly at projects that have community benefits for Tribes and others.

C: We Tribes have lost and continue to be impacted because of a lack of inclusion and equality. Federally recognized Tribes are not stakeholders but rather sovereign governments with rights and very clear trust obligations by the federal government.

Q: Interested in how the process will be defined and it must be crystal clear. Tribes are dependent on much to most of their funding from federal and state governments and thus need funding for participation and engagement. We as Tribes are concerned that the state has subsidized and promoted green energy at the expense of habitat and its many values, including carbon sequestration.
A: On intervening funding support – only involved in state projects under the jurisdiction of the Energy Facilities Siting Board (EFSB), which is extensive and formal. Smaller, private projects are not subject to state jurisdiction and thus left to municipalities to address. For projects under state jurisdiction, the proposal is to award up to $150,000K to pay eligible intervenors for staff time and attorneys.

Q: How are Tribes made aware of projects.
A: If the permitting/siting reform passes, the EFSB will need to establish specific notification processes to groups and Tribes.

Q: You talked about 2050 goals: 23 GW for OSW and 27 GW for solar. Could you speak to the strategy behind that ratio? Many in the fishing industry say, why not all 50 MW in solar?
A: The Commonwealth is seeking additional resources, hydroelectric from out of state, considering nuclear power (though it is not commercially available currently). Wind and solar complement each other as balancing resources. Solar just does not produce the output in power the wind energy can. We'll continue to update our models as new information arises.

Q: How much of each is in place to date?
A: We have 4 GW of solar today (a seven fold increase!) and 3.3 GW of OSW, one-seventh of what is needed.

Q: We as the fishing industry have no unified legal standing. There are few organizations that act as associations, but we do not have one voice. Our concern is that our voices are not communicated in a unified position and then become muted and diluted. At least in the old process, there were lots of places we could jump in. The fishing industry is important to Massachusetts and has been for hundreds of years. We need to sustain food security and not at the expense of energy security.
A: We hear you. This is a balancing act of many interests.

Q: Can you review state authority here and who could intervene potentially under the new law, if it passes?
A: We only review the last stretch of transmission cable that cuts into state waters and lands on shore. For example, for SouthCoast wind, Brayton point is the interconnection location. For Vineyard Wind 1 and New England Wind 1 and 2, Barnstable is the interconnection location. As for intervenors, Cape Cod Fishermen's Association, for example, could ask for intervenor status if the cable affects their members' fishing. The Mashpee Wampanoag could intervene if it affected their rights, cultural resources, and uses.

Transmission and the Regional System Operator.

Jason Marshall, Deputy Secretary and Special Counsel for Federal and Regional Energy Affairs, EEA, presented on the New England Transmission planning process and potential OSW transmission networks. Mr. Marshall noted that OSW networks do not currently exist and are many years away from being realized thus this portion of the presentation is more theoretical in nature.

Independent System Operator New England (ISO NE) manages the high-voltage transmission system with tariffs managed under the Federal Energy Regulatory Commission (FERC). Massachusetts is but one of the New England states who have a role in the ISO. ISO New England plans within a 10-year time frame. They recognize that changes in the electricity markets and with state energy policies and requirements, there is a dramatic shift of resources and demand for interconnection to the grid. For instance, Massachusetts is statutorily required to procure 5.6 GW of OSW by June 30, 2027.

The current approach uses radial lines to connect OSW projects to the ISO NE grid. This project-by-project approach is the status quo today. There are potential other ways to do this via radial or network transmission. Our region might coalesce around this approach. One could create an interconnected network offshore which would allow multiple pathways for energy to get to shore. For instance, if a line has to go out of service for repair, a network would provide a way for it to still get to grid. But there are numerous challenges to this approach. Who plans for such? Who owns the network? Who pays and how is it proportioned? How do states ensure multi-vendor standards to preserve the option for network in the future? We can surmount these, but there would be lots of work to do.

The following questions (Q) and comments (C) were shared by the working group:

Q: I can see the many benefits, but do we need advancement in transmission/cable technology to carry more power on fewer lines?
A: This is an active part of conversation. Europe has moved to 2000 MW capacity lines. We use 1200 MW lines now, primarily for supply chain reasons. There are also engineering impediments to interconnecting more than 1.2 GW at a time.

Q: For existing OSW projects, how would we transition from radial system to network system with projects that were already built and in operation.

A: For future procurement, we want to work on this – to ensure optionality in the future. This is an open question in my mind. If substations built now could be built out.

Q: Is the state pursuing infrastructure funding to support smart grid developments and further energy reliability?
A: Yes.

Q: Do we have a short term and long-term substation upgrade plan in place? The wind farms are producing more energy than the existing transmission infrastructure can handle presently.
A: One takeaway: we're not that far out yet in terms of having planning structure yet for this. We are missing the middle – there is lots of analysis showing illustratively the benefits of network, but the challenge is getting from those benefits to projects.

Q: What are we doing about protecting offshore cables? We talk about security and protection for onshore power sources, and we have people threatening to attack them. How are we going to protect the offshore grid elements so far offshore?
A: This is an important question. In terms of transmission on land, there have been major investments in security and there are strict standards around physical and cyber security. I understand that those same standards would apply (though be adapted for offshore).

Transmission Permitting by the Federal Government.

Josh Gange, Renewable Energy Program Specialist, Bureau of Ocean Energy Management (BOEM) presented on BOEM's role in transmission planning, siting, and permitting. He noted the following roles:

- BOEM is essentially the landlord of leases and the transmission corridor to state waters. BOEM has no jurisdiction outside of federal water.
- FERC sets national goals and approves various tariffs and regulates through orders.
- Other federal agencies have multiple permitting responsibilities (air and water quality, US EPA; marine resources, NOAA; marine sanctuaries, NOAA; fisheries, NMFS; US FWS, endangered land and avian species)
- ISO NE: as noted by the last presenter address transmission grid planning and study.
- States: approval of transmission in state waters.
- Municipalities: may have approval of transmission lines once they reach shore if the shore is municipal and not state.

Mr. Gange stated that there are two ways BOEM could approve OSW transmission. First, As part of a lease, i.e., radial process. The Lessee is conferred one or more easements w/o further competition. Lessee looks at interconnection points and talks to state about power purchase agreement. The proposed transmission routes/corridors are proposed in their Construction and Operations Plan (COP) and reviewed by us at BOEM. Second, there could be, separate from a wind project, a right-of-way granted to transmission. A backbone system, tying multiple projects into one.

For such a backbone transmission approach there would have to be close state and regional coordination. Timing and sequencing are important because you don't want to permit a regional

backbone approach that has no projects feeding into it nor a project waiting to connect because the backbone transmission isn't completed. For existing projects, BOEM could issue a lease in federal waters from the project to the new backbone cable. It's important to note a few things. First, there is no unused space in the ocean, thus potential user conflicts would have to be addressed. Second, any backbone project would have to meet all federal statutory requirements such as the National Environmental Policy Act (NEPA) and consultation with Tribes.

The following questions (Q) and comments (C) were shared by the working group:
Q: Will BOEM collaborate with NOAA NCCOS to use its spatial suitability modeling for the purpose of deconflicting transmission facility siting as it does for turbine siting?
A: Yes, and this is something we're looking into and have started in the Mid-Atlantic planning process, round two.

C: Federally recognized Tribes must be designated as Cooperating Tribal Governments in these interstate, intergovernmental project developments at every level of the decision-making processes. This approach is the solution to inclusivity of Tribes and would respect the Tribes inherent right, interest and sovereignty and uphold the federal governments Trust Responsibilities if done properly. Please note that Tribes have inherent aboriginal rights, interests, and jurisdictional authority; as well as spiritual and cultural association to the submerged lands and waters within the region out to the 200-mile limit of the Exclusive Economic Zone (EEZ). Federally Recognized Tribes retain these rights and ties to the submerged landscapes and the waters that have provided for us for thousands of years. These inherent aboriginal rights and jurisdictional authorities need to be acknowledged and part of the regulatory processes.

C: We want to look for routes that work for everybody. The Gulf of Maine (GoME) leasing is happening very soon. We have no idea on how that energy will get to land. The GoME is such a different world – the seabed is so different in terms of boulder fields and bedrock exposures. It concerns me that we have locked ourselves into lease areas but are not sure it is all going to work together. We as fishermen, people who make living from the sea, want to make sure we have a voice. We need a place at the table when connection routes are being determined and have some say in the decision.

A: Yes, you identified challenges in GoME and the transmission routes and connections are not yet determined.

C: If fishermen are involved, we can help come up with better routes. In one case, a developer spent a lot more money and affected a lot more seabed by trying to stay out of state waters and instead went through prime fishing grounds. This is not a good outcome; we need to work together.

C: Section 106 provides consultation with the Tribes and State Historic Preservation Officers, but is inconsistent with Massachusetts Historical Commission responsibilities.

C: Please note that the Office of National Marine Sanctuaries is beginning a process to update their policy and permit guidance for submarine cables. Comments are due September 30, 2024.

Considerations for Regional Transmission

Theodore Paradise, Partner, Global Energy, Infrastructure, and Resources practice, K&L Gates, provided background on the idea of a more regional transmission network.

Mr. Paradise began by noting that the opportunity to design network can help lower energy costs and create movement across grid, which can reduce rates, while also possibly reducing fishing and environmental impacts. The analogous choice is between an extension cord (the single, radial approach) and a power strip (a network). The key is getting this done quickly. It can be done. The current approach is creating a kind of spaghetti effect: more lines, more landing points, more money. There are challenges to join cable laying, such as coordination across projects, companies, and leases, sharing the cost, having the scale of vessels able to handle larger lines, and using the maximum cable size possible. Europe is at 2 GW cables while we remain at this time at 1.2 GW.

We have some policy choices. From a permitting perspective for GoME, Boston is the largest load center but it is hard to reach. The transmission system cannot simply easily deliver it wherever you land. In addition, the Stellwagen Bank (SBNMS) to close to Boston. ISO New England has not focused on this issue and the State's needs to date. States would need to band together for a request for proposals for transmission most likely and take the lead on joint planning.

The following questions (Q) and comments (C) were shared by the working group:
Q: Isn't the distance from shore important for economic reasons but can also pose problems?
A: A single or a few cables can more easily carry the cost of longer distances, which spreads the cost over multiple projects. We are likely to have load growth from data centers and electric cars across the system.

Q: How does SBNMS factor in decisions? It is an extremely important and dynamic area. It is unwise to go through these areas.
A from State: These cables are not coming through SBNMS and there is no plan to bring them through the shore of Cape Cod. It doesn't make sense from a cost, transmission, load, or disruption perspective.

C: I have been involved with the transmission issue for a long time and more recently with Cape Wind. In New England, there is a 1200 MW limitation. Why can't we put two cables side by side and have 2400 MW?
A: There are several factors, e.g., regulatory standards, the older transmission system in New England requiring updates. It is an issue of coordination, existing policy frameworks, and the status quo of doing business, rather than an economic or technical issue.

C: BOEM did not engage elected officials on the transmission task force. I learned that projects would cost upwards of eight billion dollars, and that cost would be borne by Massachusetts ratepayers.

A: The cost of transmission depends on how transmission is designed. It's important to note that transmission pays for itself quickly in energy markets. ISO New England integrates renewable energy in the system for 20 or 40 years, resulting in significant impact on price and the energy market. Ultimately, the cost and benefit for the consumer depends on the flexibility of the design.

Q: There is a perception that the closest GoME lease area to the outer Cape will require transmission landing on the Outer Cape. Why not to bring in power to that location?
A: The grid that we have is built for use of the area we have. If you have people distributed houses, relatively low density, seasonal use, and non-industrialized, you don't have large transmission capacity there. From a developer's perspective, you do not want to go there. Even if you could get past ocean use issues, there's nothing to connect to. Developer would have to pay for the transmission grid upfront so they would want to find the most robust part of the transmission system rather than upgrade an entire system to get to Boston.

Closing

The facilitator thanked the participants for coming. The next meetings are October 10 for the HWG and October 18 FWG in-person. Dan McKiernan shared closing remarks and thanked everyone for joining.