

# New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116 John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director* 

# FINAL MEETING SUMMARY

## **Habitat Committee**

Fairfield Inn Marriott, New Bedford, MA October 4, 2017

The Habitat Committee met to gather information on offshore wind development offshore Massachusetts, and discuss ongoing fishery management actions related to habitat.

### MEETING ATTENDANCE

**Committee:** John Quinn (chair), Doug Grout (vice chair), Vincent Balzano, David Borden, Lou Chiarella, Peter deFur, Elizabeth Etrie, Mathew McKenzie, Eric Reid, Melissa Smith

**Others:** Michelle Bachman and Rachel Feeney (NEFMC staff), Mitch MacDonald, Travis Ford, Doug Christel (GARFO), Meghan Lapp, Chris McGuire, Ron Smolowitz, and John Williamson (Habitat AP). Invited presenters from BOEM and the offshore wind development industry (detailed below). Approximately 20-25 additional members of the public also attended.

### KEY OUTCOMES

- The Committee received a briefing from agency staff and three offshore wind developers on a variety of offshore wind farm proposals in various stages of development. The briefings were followed by a roundtable discussion. The Committee affirmed their desire to engage with the offshore wind industry as these projects proceed.
- The Committee reviewed 2018 Council priorities related to habitat, and recommended adding one to address any areas of the Omnibus Essential Fish Habitat Amendment that are disapproved, if partial approval of the amendment occurs in January 2018. Other priorities were also recommended.
- The Committee discussed next steps for the coral amendment and clam dredge framework. Both actions will be addressed in more detail at the next meeting.

#### UPDATES OF GENERAL INTEREST

Staff noted that the notice of availability for Omnibus Essential Fish Habitat Amendment 2 was expected to publish shortly, putting a deadline for the record of decision in early January. The proposed rule, which will reflect the amendment measures as recommended by the Council, will publish shortly thereafter. The record of decision will assert whether NMFS approves of the amendment as drafted, if the amendment is partially approved, or if the amendment is disapproved. The final rule will reflect the record of decision. Notice of availability and proposed rule publication trigger overlapping public comment periods (the NOA period is 60 days and the proposed rule comment period will be shorter, likely 30 days).

#### BRIEFINGS AND DISCUSSION ON OFFSHORE WIND DEVELOPMENT

Council engagement on offshore wind development was identified as a management priority for 2017. There has been significant recent work in this area, particularly offshore Massachusetts, as developers evaluate the meteorological, geological, and ecological characteristics of their leases, and begin to draft construction and operations plans for each proposed wind farm. Staff from Massachusetts CEC, BOEM, and three of the developers working off Massachusetts briefed the Committee on recent work. Following the briefings, the Committee and developers engaged in an open discussion period which included questions about the projects, outreach and fisheries engagement, and Committee concerns.

Terminology related to offshore wind development:

- <u>Intergovernmental Renewable Energy Taskforces</u> a group of federal, state, local, and tribal government partners focused on planning and development of wind energy offshore of a specific state. The role of each Task Force is to collect and share relevant information that would be useful to BOEM during its decision-making process.
- Wind energy area a planning area from which a series of leases may be issued. WEAs are comprised of standardized numbered blocks. Various WEAs have been modified through the taskforce process. Leasing and development of a WEA can occur in phases over time and multiple companies may develop a single WEA.
- <u>Lease</u> issued by BOEM in a competitive auction format, or rarely may be non-competitive if there is no competitive interest expressed. A commercial lease gives the lessee the exclusive right to seek BOEM approval for the development of a leasehold. It does not grant the right to construct any facilities.
- <u>Site Assessment Plan</u> developed by the lessee and approved by BOEM, the SAP allows the lessee to conduct studies to characterize the geology, meteorology, and ecology of a holding.
- <u>Construction and Operations Plan</u> developed by the lessee and approved by BOEM, the COP summarizes the specifics of how the wind farm will be constructed and operated.
  Very exact engineering details are specified in other documents.

- Fisheries liaison a representative of the wind energy company to the fishing industry.
- <u>Fisheries representative</u> a representative of the fishing industry to the wind energy company. Both FLs and FRs are paid by the developers.
- Power purchase by a local or regional utility is also termed <u>offtake</u> and the cable from the wind farm to shore is the export cable.

## MASSACHUSETTS CLEAN ENERGY CENTER

Bill White described the Massachusetts Clean Energy Center (Mass CEC) and some of their work in this area. Mass CEC is a state agency "dedicated to accelerating the success of clean energy technologies". Their work in offshore wind includes stakeholder engagement, workforce development, port and infrastructure assessment, environmental data collection, and other initiatives: <a href="http://www.masscec.com/offshore-wind">http://www.masscec.com/offshore-wind</a>. Mr. White explained the process by which the Massachusetts Wind Energy Area (WEA) was developed and refined a few years ago, beginning in 2009, and then discussed ongoing work at Mass CEC. Massachusetts has a state wind energy taskforce through BOEM, but CEC also convenes two working groups on fisheries and habitat to broaden the number of people at the table. Participants in the fisheries group are listed in the slide presentation – new members are welcome.

Mass CEC is very engaged in the development process and is committed to listening to fishermen. A big concern they are hearing is about the potential for operating restrictions/exclusions in wind farms, and the approach to exclusions varies by country in Europe. Other fishery concerns include impacts of electromagnetic fields associated with cables, as well as cable siting (cables include those between turbines as well as the windfarm to shore transmission cable). He mentioned that CEC wrote a report exploring the European experience with stakeholder engagement (staff has a copy if members would like one). Questions were focused on how to minimize impacts. A key recommendation from this report was to hire fisheries liaisons and representatives, and this is now in place.

Mass CEC is also working to facilitate regional surveys related to offshore wind site assessment, in partnership with Mass DMF. It would be better to coordinate efforts across projects rather than having multiple individual but similar surveys.

Dr. deFur asked if they had coordinated with the U.S. Navy on areas of closure. Mr. White noted that the taskforce includes other federal agencies and this process includes the Department of Defense.

## BUREAU OF OCEAN ENERGY MANAGEMENT

Brian Hooker briefed the Committee on leasing and development activity for the entire east coast. Soon there will be 13 leases along the Atlantic Coast, the most recent is the Avangrid lease area off NC. The process for development is phased, including planning and analysis, leasing, site assessment, and construction and operations. The state taskforces engage throughout. Each lease notice includes a public comment period.

The leases allow a site assessment term of up to five years. Some developers have requested extensions on the site assessment timeframes. The assessments include the collection of meteorological data as well as other environmental data including fish and fish habitat. Three wind farms off MA are in the site assessment phase at present. During the assessment phase, developers also draft construction and operations plans (COP). The COPs are a bit flexible in terms of exactly where turbines and cables might be sited, but a document called the Facility Design Report and Fabrication and Installation Report will have the final planned layout for each wind farm. In terms of environmental review, once a COP is received, BOEM evaluates the worst-case situation when drafting the EIS. Decommissioning requires a separate application later.

Emera's Atlantic Link is a project to bring renewable electricity from Canada to Massachusetts via an offshore cable that comes onshore and connects with the grid in Plymouth, MA. The next step is a call for information to determine competitive interest in any of the lease blocks. They will likely be submitting a right of way request, and two potential routes are under consideration, which are under revision at present. Further information about the project will publish soon.

The SAP for Vineyard Wind will be approved soon. Surveys are ongoing. A COP is anticipated during late 2017/early 2018. Bay State Wind has a SAP approved, which includes FLIDAR buoys. A COP is anticipated in late 2018. Surveys are ongoing. At the South Fork wind farm surveys are ongoing, a SAP is nearly complete, and a COP is anticipated in 2018. There will be a lot of activity offshore MA in the near term, in large part because the MA request for proposals has generated a lot of interest.

For the remaining two areas of the MA WEA that are presently unleased, a proposed sale notice will be published by the end of the year, with a lease expected around August 2018. BOEM plans to update the existing environmental assessment for new lease sites in MA WEA.

The NY taskforce just met on October 3, and is more regional in membership including representatives from RI and MA. They are experimenting with expanded taskforces when it seems useful, like in NY. The Statoil Site Assessment Plan (SAP) is expected later in 2018 (originally due in April, but an extension was requested recently). In addition, during 2018 leasing could occur offshore NY in and around the areas recommended to BOEM by NYSERDA. BOEM's next step is a call for information and nominations (published in Federal Register). There will be a formal comment period when the call is published, and comments have been requested from the NY taskforce. The Council can submit comments now, informally, if desired.

There are a variety of active projects outside New England as well. The northern lease area off NJ (US Wind) should have a SAP completed in March 2018. Ocean Wind (DONG Energy) has completed surveys for the SAP and BOEM has received a SAP for review, including FLIDAR deployment; COP anticipated 2020. Off DE, the SAP term of the Skipjack Wind Farm

(Deepwater Wind) ends in 2019. The SAP is nearly complete for the US Wind site off MD. This is the only project that has proposed an actual meteorological tower. The Coastal Virginia Offshore demonstration project (formerly VALTAP) will include two turbines, and construction is anticipated in 2020 (likely the next steel in the water). BOEM has already approved the equivalent of a COP for those two turbines. VA commercial lease area is under review, with deployment anticipated 2019. Also, offshore Kitty Hawk, NC, the Avangrid lease is almost executed.

In terms of the environmental studies program, there are a variety of work areas. BOEM is reviewing the final report for the first phase of the Atlantic marine assessment for protected species, and funding the second five years of project. There are telemetry arrays to detect tagged fish, with the primary target being sturgeon, although other species are identified as well. Social science studies include an assessment of port modifications, and which ports can support development. Have been working with GARFO to use the DMIS data sets to evaluate fisheries impacts (DMIS links dealer and VTR data), and hope to share more on this soon. There is an EMF study in Long Island Sound. Baseline habitat studies for all WEAs conducted by NEFSC will be available soon (hopefully by the end of 2017). Very interested in larval transport, and hope to expand on this with new modeling done by UMass Dartmouth's School for Marine Science and Technology. Have been assessing lobsters and crabs around Cox Ledge – there will be more wok next spring. Other upcoming scientific work includes a construction noise study on black sea bass and squid. RODEO is a long-term project that will include several tasks, among them pile driving impacts and habitat work around the Block Island Wind Farm. BOEM does annual studies solicitations, and drafts an environmental studies plan every three years. They try to be as transparent as possible with their planning.

There was a brief discussion of Council representation on the taskforces. BOEM has struggled to effectively engage the Council through the state task forces. They have kept these to state, local, and federal government officials to avoid triggering federal advisory committee act requirements. Their approach in recent years has been to engage directly with the Council to gather feedback, rather than working through the taskforces with the Council as a member. Mr. Hooker has attended various Council meeting over the past few years. Dr. deFur noted that the MAFMC has had conversations about representation on the taskforces, and he didn't recall issues with members needing to represent their state and the Council simultaneously.

Dr. deFur also asked about the environmental review process. Have cumulative effects been considered? What about impacts to prey species? Mr. Hooker responded that cumulative effects analysis has been limited to reasonably foreseeable future actions, and there has not been a programmatic assessment of the impacts of full build out everywhere. When plan approval is imminent, a wind farm would be included in cumulative effects analysis for other sites. In terms of impacts, yes, the environmental review will cover each species for which an impact is possible. Mr. Reid recommended that impacts analysis be as comprehensive as possible. If fishing shifts away from inshore grounds into offshore areas, species beyond the wind farms will

be affected. Mr. Hooker replied that they are willing to review models or information that predict fishing effort shifts to inform their environmental review.

## DONG ENERGY (ØRSTED) – BAY STATE WIND FARM

Laura Morse briefed the Committee on the Bay State Wind Farm. She noted that DONG Energy is changing its name to Ørsted, because DONG (Danish Oil and Natural Gas) no longer reflects their broader portfolio of energy projects. John Williamson is their fisheries liaison. She also introduced Hal Roberts who works on DONG's United Kingdom projects. The slide presentation lists other points of contact at DONG.

In terms of the Bay State Wind project, it is a 50/50 partnership with Eversource. Size of the area is 30 square miles, which can hold up to two GW worth of turbines. They will have some open houses this fall. They are doing surveys now, including geophysical/geotechnical and living resources. FLIDARs are currently deployed, as well as a meteorological buoy. They publish and distribute notices to fishermen and other mariners when surveys are planned.

In terms of fisheries issues, they follow BOEM guidelines on data collection for fish and benthic/non-target species, as well as social/economic conditions. There are also archaeological and other guidelines. All the survey work informs the COP.

Mr. Williamson noted that they have hired fishermen to go on surveys with the Bay State Wind Farm area. The purposes are to communicate with fishermen in real time during the surveys, and to log fishing activity to figure out what the area represents to the fishing industry. This includes an assessment of the target species and gear types employed. They are looking for fishermen from multiple states to help advise DONG in an iterative fashion over the long term.

## VINEYARD WIND

Rachel Pachter briefed the Committee on the Vineyard Wind Farm, which is a collaboration between Vineyard Wind and Vineyard Power. Ms. Pachter is presently serving as the fisheries liaison and Jim Kendall is their fisheries representative.

Vineyard Wind's lease is the furthest east, and was acquired in 2015. In terms of criteria that make for a good wind farm site, at this location, the wind resource in these areas is consistent with load demand. On summer afternoons, there is lots of wind, and lots of demand. The seabed composition drives cost of the installation, and the surveys are essential for determining these characteristics on a fine scale. The proposed wind farm is close to the grid, and there is lots of demand in coastal MA. Power is lost with longer transmission distances. Power purchase agreements are an essential precursor to build outs.

Vineyard Wind's partners on the project include the investors, Copenhagen Infrastructure Partners, Avangrid Renewables, with expertise in construction and operations, and Vineyard Power. See this press release for details: <a href="http://www.avangridrenewables.us/rel\_17.05.09.html/">http://www.avangridrenewables.us/rel\_17.05.09.html/</a>.

Geological surveys were done in fall 2016, and the SAP has been submitted. Planning for the export cable route is ongoing, including surveys conducted in summer 2017. The export cable is important to discuss. Cables have more stakeholders than the turbines because of that onshore connection. They are looking to connect in Barnstable. Hopefully fisheries issues are limited to the installation period.

Vineyard Wind has been using the surveys as an initial test bed to see how to best engage the fishing industry in terms of providing information and avoiding conflicts on the waters. Mr. Kendall noted that communication around the earlier Cape Wind project was lacking, but that this failure spurred process to begin early on to address concerns. Detailed surveys are in the best interest of the wind developers and fishing industry so that changes can be understood. One issue beyond exclusions that could be an issue would be radar interference.

Ms. Pachter noted that they consult with other groups, including NGOs, tribes, and cities and towns.

## DEEPWATER WIND - SOUTH FORK WIND FARM

Aileen Kenney briefed the Committee on Deepwater Wind's work. Deepwater is a Providence, RI based developer.

Deepwater Wind developed the Block Island Wind Farm, which is currently operating five turbines off RI. Environmental surveys at BIWF are ongoing. Their fisheries survey plans are flexible, but the plan is to link to ocean planning priorities and coordinate with other data sets where possible. Except for meteorological data, all monitoring and site characterization data will be made public. They tried to be very collaborative when developing the site and during construction and ongoing monitoring. She mentioned a December 11 and 12 science forum to be held in RI.

The focus of her presentation was the South Fork Wind Farm, although other projects may be developed within Deepwater's MA lease area. The power purchase agreement for South Fork was approved this year. They plan to submit their COP early next year, and implementation is expected in 2022. The estimated two-year review period will include an EIS. Beth Casoni is the Fisheries Liaison for New England, but there are other fisheries representatives and liaisons in additional ports, including Julia Prince in Montauk. The NB Harbor Development Commission is a fisheries representative, and there should be other representatives in the future. The South Fork Wind Farm is east of Long Island in the MA WEA, and is planned to have no more 15 turbines total. The offtake will be onto Long Island, and the planned cable route is via the South Fork.

Surveys are spatially comprehensive (mowing the lawn).

Work closely with environmental groups, native American tribes, and commercial fishing. Contracted with Consensus Building Institute to do outreach meetings. Deepwater has rerouted transmission lines based on fishermen input, and shifted their focus to a southern route over a northern route. Permitting will involve many municipal, state, and federal agencies. The Coast Guard will complete a navigational risk assessment. A consistency determination will be made by NY and other states (MA, RI, possibly CT).

Ms. Casoni emphasized that fishing industry engagement has been ongoing, with concerns centered around environmental impacts.

A variety of scientific studies are ongoing (see slides). Benthic surveys are an early step. Areas of hard bottom are not desirable for project facilities including cables, which aligns with environmental concerns about development of such habitats. A specific list of target issues includes the potential for impacts to cod spawning, as well as possible effects on sturgeon, squid, lobster, Jonah crab, monkfish, and scallops. They are open to a regional approach and want to maximize benefits of research dollars spent. They are committed to sharing data collected except for proprietary meteorological information.

### **DISCUSSION**

The Committee engaged in a robust discussion with the developers. Questions and answers are summarized below.

Committee member Doug Grout - Are all projects on separate cables? Can cables be brought into a single location to minimize the number of cables?

Bill White – We've begun to think about that. Easier to have separate cables, but state would like developers to consider coordination with a common import cable. The developers need to give two proposals to MA, one where they connect directly to the grid, and where they join at sea with other cables. Proposals for individual vs coordinated/interconnected transmissions are requested by the state. Also considering interconnections between states. The NY taskforce has discussed this issue as well. Mr. Hooker noted that BOEM issues grants for right of ways, but multiple companies could use a single ROW.

Committee member Vincent Balzano – It seems that the biggest impact will be the transmission lines, not the sites themselves. How are the cables buried? As mobile gear fishermen I avoid cables.

Brian Hooker indicated that 6 ft is often the goal. Aileen Kenney commented that the Block Island project had a target of burying the cable 4-6 ft. They had the flexibility within the permit to have mattresses where it couldn't be buried (up to 1% of route). Have heard that fishermen are getting hung up on the mattresses. However, our monthly survey is being done by Capt. Rodman Sykes out of Port Judith, and he can trawl over the export and inter-array cables. Completed a study this fall to look at the location and burial of mattresses and any growth on them. One had moved. Trawl marks indicate that gear goes around/near the mattresses. At Long Island, the bottom is softer, so they are trying to bury deeper. Siting the cables in areas that they can be

buried is a top criterion. They don't want the cable damaged, so it's in both of our interests to avoid interaction. But a tough issue, and an area of risk for them.

Council staff Michelle Bachman – So the path of the cable is set in the operations plan?

Yes, generally, define a corridor in which the cable would be located. Need geophysical and geotechnical surveys (very expensive) before submitting the COP to identify the path. Also need to engage with stakeholders proactively. Most of the discussion with the mobile gear fleet had been about cable location. Mr. Hooker commented that they have to remain within a 200 m path specified in the COP during construction.

Committee member Peter deFur – Is there a required depth or is it just a target depth? What are the requirements? Brian Hooker – not a regulatory requirement - it's a target burial depth. We do an engineering and design review to determine if the area is likely to be stable so that the cable will be adequately protected. There's no regulatory requirement on the burial depth.

Committee member Peter deFur – So I assume the review process has a public input process? The Council could urge that this be a requirement. Brian Hooker – There is an EIS during the COP development phase. BOEM can request a burial depth, and has done so for the inter-array cables. Ms. Pachter noted that they do their own risk assessment about where it is most critical to look at burying, given fishing and anchoring activity and other issues. They do monitoring post construction.

Committee member Doug Grout – What's the diameter of the cables? (Answer was 7-10 inches.) What are the results of the electromagnetic field studies for fish and crustaceans – is there any way to insulate the cables to shield the field? Brian Hooker – they are insulated. The electric field is shielded, but there is an induced magnetic field that is the concern. There are different cable designs, for example, export cables vs. interconnects are different. In Europe, increasing burial depths reduces the magnetic field. Impacts seem to be fairly benign.

Committee member Matt McKenzie – will internal risk assessments be made public? Ms. Pachter noted that yes, they will be part of the COP.

Committee member Libby Etrie – in advance of this discussion, I reached out to the fishing industry. Everyone said that they received nothing in terms of direct outreach on these wind farms, short of one person. What kind of cross check are you doing to ensure you are reaching the right people (i.e. the people who fish in the area)? How are you confirming that the message is getting out there?

John Williamson – I'm not sure who you spoke with, but for the last year, I've been sending notices to about half of the sector managers. Ms. Libby responded that those aren't really the point people on these sorts of issues. Some are part time, or don't live close to their members. They are not the best go to. Are you tallying who you are reaching?

John Williamson – yes, we are logging those conversations (400 individual fishermen between NY and MA since January). Then, you need to create the feedback loop, and grow the list of contacts over time. There are fishermen on the assessment survey vessels, and they log which fishermen they are encountering in the wind farm area, and I get that data. They plot every bit of fixed gear. We are creating a multilayered picture of fishing in the Bay State Wind Area.

Rachel Pachter – Vineyard Wind is doing similar activities. It's a challenge to get communication out, but we follow leads. If people say that they are reading FisheryNation.com, we send information there. We could do more to assess impact and how well our outreach is working. We will ask you after the meeting to see who you talked with and then reach out to them.

Committee member Doug Grout – what about the charter/for hire sector?

Rachel Pachter - Yes, there are activities in that space as well. We are in the process of identifying a recreational liaison.

Committee member Peter deFur – have local communities been given the opportunity to address these issues? Towns like New Bedford will have impacts. Ms. Morse responded that they have two community liaisons, in New Bedford and Martha's Vineyard. There are others engaged as well, and it's a huge matrix of individuals. While there are going to be gaps, we are trying to be thorough. Let us know if there are people we have missed.

Eric Peckar – Vineyard Power helping bring community input into the process.

Bill White – noted that Mass CEC will provide forums for developers to engage with the Community.

Committee member Eric Reid – You have a lot of entities collecting data from a lot of sources. Who owns the data? Is there a requirement to make data public?

Rachel Pachter – To start with, in the wind energy areas, the state and BOEM collected a lot of data, which is available through the portal. For the data we collect, we release almost everything through the EIS process. Some of data is sensitive, because there is competition among developers (for example sub-bottom data that affects jacket design, and metocean data). Mr. Hooker agreed – COPs and EISs will have data.

Committee member Eric Reid – I don't know about that. In the NY call area, we provided a lot of economic information that didn't translate into the economic impacts of the area. I don't think we are getting the full picture.

Committee member Doug Grout – For Michelle, can the Council use the biological and physical data that is public? Ms. Bachman – I have the same question for offline follow up. There are data

poor areas, that this could help with. Ms. Kenney suggested that they can provide an example of data collected at Block Island, and go from there to coordinate on data sharing.

Committee Chair John Quinn asked about workforce development, and what was happening there. Bill White and a representative from Bristol Community College noted that they are researching this issue. Many of the skills for offshore wind technicians are similar to those that fishermen have, and BCC is exploring how they might provide additive and complementary opportunities to commercial harvesting. They are evaluating how training happens.

Committee member Eric Reid – What's the total area if all of these projects are totally built out along the east coast? What's the buffer around the areas? Brian Hooker – Number of towers is a function of the power demand of each state – demand dictates to what extent the areas will be built out. On the buffers, there are no plans for buffers or restricted areas. Block Island is an example. There may be temporary restrictions around construction, but none are planned during operations.

Committee member Eric Reid – There are buffers during maintenance. As far as not being able to estimate full build out, electricity is a pretty good commodity. It's perfectly reasonable to sell electricity. There's electricity imports from all over.

Bill White – MA is looking at 1600 MW over 10 years, that's 200 turbines. Turbines are getting bigger, so that's fewer. With larger 10 MW turbines, that's 160 turbines, spaced 1 mile apart.

Aileen Kenney - At Block Island, the turbines are ½ mi apart. There was essentially a de facto exclusion of fishing activity during construction, since turbines were installed anchored vessels. We requested that fishermen not fish there while installing. We compensated fishermen for the exclusion. Offshore, the turbines would be 0.75-1 mi apart, and floating vessels would likely be used during construction. In this case, don't see the need to ask for no fishing. There was a 500 yard safety buffer around large jack up vessels when turbines were installed. Laura Morse noted that offshore AK, the Coast Guard did enact safety zones given safety risks associated with vessel boardings by Greenpeace. The Coast Guard generally is very reluctant to issue restrictions.

Committee Chair John Quinn – Do towers act as artificial reefs for fish?

Laura Morse – There's close to 3,000 fixed platforms in US waters in the Gulf of Mexico. Unique environment and fisheries here, but there is data from that region. Also, in Europe, they are starting to decommission sites, and there is push and pull about added value of sites as artificial reefs. Aileen Kenney – doing a recreational study around Block Island Wind Farm. They have found so far that there is more recreation fishing within the farm than before the turbines were installed. The rec community likes fishing there.

Committee member Melissa Smith – What is the longevity of the structure? Rachel Pachter - About 25 years. Decommissioning cost is on the developer. Melissa Smith – So, when considering impacts, is there a requirement or plan to assess the influence of the structures in the water for 25 years? If the impacts become negative, what happens? Brian Hooker – if there is harm, mitigation is required. This is a provision in BOEM's regulations.

Committee member Libby Etrie – On communications, should use the permit and dealer databases on NMFS website. Can sort it by fisheries and permit. Includes party/charter.

Audience member Ron Smolowitz – The states have encouraged development further offshore to avoid viewshed issues. Does this take a lot of ground away from the developers for the concerns of one group of stakeholders, the coastal waterfront homeowners?

Brian Hooker – BOEM's authority starts at 3 miles. There are no regulation on distance, but multiple viewpoints are considered siting and cultural impacts, viewscapes from National Parks, etc.). Bill White clarified that in Massachusetts, it's 14 miles off coast.

Audience member Ron Smolowitz – agreed, but the wind farms are already pushed offshore before fishermen were ever involved. Ecologically, it makes more sense to be inshore. On the research, I've been advocating for developing baselines. It's money driven thing. The wind industry should have a RSA program. There should be a government controlled process to do research. Turbines might displace sea turtles onto fishing grounds. Do the wind companies support the concept of a fund for research?

Aileen Kenney - We are committed to collaborative research. We have collectively discussed science. As the industry grows, a group effort on science would be wise. Rachel Pachter – we are headed towards collaborative approaches. Echo earlier points – we want to spend research dollars wisely offshore.

Audience member Jessica Coakley – On decommissioning, the plan is developed upfront. Is that plan reviewed in the future? Brian Hooker – yes.

Committee member Eric Reid – Council representation on task forces is not a requirement. Is BOEM willing to commit to Council participation? Brian Hooker responded that there was some discussion a few years ago about adding Mr. Grout to a taskforce, but this never came to fruition. (BOEM and Council staff followed up on this issue after the meeting and will continue to explore the idea of putting a Council member on one or more of the state taskforces as appropriate.)

John Williamson noted the upcoming National Academies meeting on offshore wind, scheduled for November 8 and 9 in New Bedford.

#### 2018 COUNCIL PRIORITIES RELATED TO HABITAT

Ms. Bachman summarized the list of possible 2018 priorities presentation. Final action on coral amendment anticipated in January. Clam framework timing depends on when we see the habitat amendment published.

Dr. Quinn asked what happens if the habitat amendment comes back with partial approval? If the Council wants to address these areas, should be on 2018 priorities. Ms. Bachman noted we won't know about approval until the January meeting.

Dr. Quinn asked if we are looking for a ranking on this list? Ms. Bachman responded that it's up to the chair and Committee.

Dr. deFur asked if the Committee needs to make a recommendation about being proactive at the Council for including Council representative on the BOEM taskforce. The lack of representation is unacceptable. Don't buy the argument that we can't separate our state and Council interests. Mr. Reid agreed the issue should be raised.

Mr. Chiarella stated his hope that the coral amendment should be top priority. Dr. McKenzie agreed. Ms. Bachman agreed as well, but felt that December would be difficult given other work and the need for time for public review.

Ms. Etrie asked if we need the staff priorities on the list. Dr. Quinn suggested that we include all priorities (staff focused and those that involve the Committee more actively). Ms. Bachman suggested adding a response to the Omnibus Amendment to the list. Mr. Grout suggested that depends on what comes out. The decision on OHA2 could impact the clam framework. He agreed that we are so close on the coral amendment, it is important to complete the action soon. He observed that the Option 7 coral broad zone was similar to the Committee's previous preferred alternative (Option 6).

The Committee agreed to add a priority related to OHA2 follow up, and divided the list into two categories, Committee tasks, and staff/PDT activities, as follows:

### Committee tasks

- o Complete Omnibus Deep-Sea Coral Amendment
- Additional work related to OHA2 as necessary (will not know whether the amendment is approved in full until January 2018 meeting)
- Framework action to address surfclam access to HMAs
- o Develop Council policies on non-fishing activities, including energy development

### • Staff and PDT activities

- o Update and further development to SASI model
- o Habitat impacts of other management actions
- o SBNMS advisory panel

o Develop habitat and fishery related comments on non-fishing impacts in consultation with other agencies

### **ONGOING MANAGEMENT ACTIONS**

## DEEP-SEA CORAL AMENDMENT

Ms. Bachman summarized the status of the coral amendment, including data sources that will be examined when assessing the Option 7 broad zone boundary. She sought feedback on the next steps in process.

Mr. Reid asked if the PDT will include recommendations from June in their edits to the broad zone. Ms. Bachman responded yes, generally, but will look at additional VMS-based effort maps to determine if there are additional fishing grounds. She explained how the VMS probability model works, that data point represents the probability that fishing is occurring at the location, multiplied by the time since the last polling. These data are interpolated to generate a heat map. Tables already in the amendment document summarize the total amount of fishing in each area, across all data points, by adding the hours fished values for all VMS polls falling in a particular management area.

Mr. Reid asked about the VTR model. Dr. DePiper's paper suggests that 2/3 of the trips are 7 days or more, and that trips could include effort 70-130 miles from the reported point. He noted that it seems incorrect to assume that revenue will be concentrated at the reported point, and not along multiple locations fished during the trip. Ms. Bachman agreed that this is a difficult assumption to make, but that the data products are nonetheless useful in aggregate, if used appropriately, given that we know there is uncertainty in the results. Mr. Reid appreciated the response, but remains concerned about the approach. He also expressed concerns about any reliance on observer data where straight line tows are assumed, as fishing occurs along contours.

Mr. Borden asked if the Council combines two broad zone options (6 and 7) with varying gear restrictions, is this problematic from an enforcement perspective? Can enforcement weigh in on this issue? Travis Ford (GARFO) commented that enforcement of the 600 m line (Option 6) would be on fixed gear, i.e. a cutter finding pots in the water. A shallower line (Option 7) would be triggered by VMS or a flyover to look for mobile gear fishing. There are buffers on how closely these areas can be enforced. GARFO has been thinking about this information, and has experience from the Mid-Atlantic. Mr. Borden agreed it would be helpful to have more information on enforceability.

Following up on the discussion of fishing effort data, Ms. Etrie agreed that while the approaches may be overly simplistic, she appreciated that we are using multiple methods. She suggested that it may help look at regulations about reporting in multiple statistical areas, since they have changed a couple times since 2010.

Mr. Borden asked how is the enforcement contemplated? What if a vessel with VMS drifts over the line? Mr. Ford responded that gear has to be on board if a vessel is in the area. But enforcement of that would be difficult given current methods. Ms. Bachman suggested that for a violation to occur, the vessel would have to be in the area with their gear in the water. Mr. Ford responded that yes, that would be the clearest. It might be possible to identify vessels that repeatedly go over the line. Ms. Bachman suggested that maybe a good step would have someone in enforcement prepare a summary of the experience to date with the MAFMC coral zone. GARFO staff agreed to coordinate a more detailed briefing for subsequent habitat meetings.

Audience member Meghan Lapp asked if the PDT has looked at the lobster GRA lines, so that coral zones can be drawn accordingly. She also asked about the data from the two VMS approaches, and what they represent. A single VTR point to represent effort on a squid trip is problematic. Based on some analyses prepared for the NY wind area (Statoil lease), the VTR data seem to be an underestimate. Dr. Feeney noted that the PDT is considering the GRA locations in relation to the coral zones.

Dr. McKenzie asked if it was possible to put data products on the portal. Ms. Bachman agreed it would be possible to put the draft management areas on the portal, but likely not the VMS data sets. Ms. Etrie agreed it would be good to reach out to the fishermen to get their feedback directly on the revised option. One approach could be to identify individuals represented in the VMS data and see if they have been involved in the amendment process somehow.

There was some discussion of timing, and whether it would be possible to get to final action in December. Ms. Bachman reiterated her earlier statement that it would be difficult to schedule the required meetings by then, and some Committee members agreed. In terms of getting information, an AP meeting combined with direct outreach to specific groups seems sufficient for gather public feedback on the proposal, before going back to the Committee for a recommendation.

# CLAM DREDGE FRAMEWORK

Ms. Bachman gave an update on the clam framework. The PDT met in September and received a report about a survey conducted on Nantucket Shoals this August. The PDT is also working on image analysis. The next step is to assemble all the information and see how specific locations within each habitat management area vary in terms of habitat vulnerability and clam abundance. With this information in hand, we can work on specific alternatives for the Committee.

Mr. Borden (on behalf of Wallace Associates) commented that the PDT has done well to assemble the information. He urged the PDT to meet with the clam advisors earlier rather than waiting. Industry could offer alternatives that wouldn't be considered otherwise.

Ms. Coakley added that the MAFMC can support engaging the clam advisory panel. They have a clam amendment moving through the process now, which will include public meetings in the spring. NEFMC staff could attend those meetings and solicit feedback on the framework alternatives.

## DISCUSSION OF EXECUTIVE ORDERS RELATED TO REGULATORY REVIEW

Staff reminded the Committee about two recent Executive Orders related to regulatory review, and summarized northeast fishery regulations related to habitat in a general sense. Comments as to regulations that might be considered for elimination as part of a two for one (two removed for every regulation implemented) were solicited from the Committee and the public. There were no suggestions provided on this matter.

The meeting adjourned at 3:38 p.m.