

New England Wind Lease Area Transit Corridor Workshop
October 31, 2018
9:00 to 5:00 PM
Workshop Summary

Crowne Plaza Hotel
801 Greenwich Avenue
Warwick, Rhode Island 02886

The following is a summary of a workshop held on 31 October 2018 regarding transit corridors in the New England Wind Lease Area. This summary is not intended to be comprehensive record of all comments made, but rather, a summary of key points without attribution by name or organization. All errors and omissions are the sole responsibility of the Consensus Building Institute (CBI).

Format

The workshop engaged over sixty (60) participants from wind energy developers to fishermen to state and federal agencies. The workshop was convened by the Responsible Offshore Development Alliance (RODA). The day included exploring interests around transit, identifying the various pros and cons of different potential corridors, caucusing among developers and fishermen to hone or narrow transit priorities, and a general discussion of fishery mitigation plans.

Interests Identified through Small and Large Group Discussion

The workshop began with small and large group discussion around the interests parties have in providing for transit across, through or around current leases and specific project array designs.

Top Interests Cited

- Safety
- Honor existing fishing practices
- Consistency across lease areas
- Ensure everyone's efficiency
- Address multiple uses of these lanes
- Accommodate dynamic fisheries and potential future conditions
- Considering the transit connections between array design and transit corridors around or within
- Data-driven decisions
- Address cumulative impacts

- Transparent process

Overview of Interests by Stakeholder Group

- Fishing needs
 - Fishing within the array
 - Fishing within lanes
 - Fishing on grounds
 - Protect existing/historic fishing practices
 - Fairness for different ports
 - Efficiency
 - Safety
 - Business co-existence
 - Consistency across lease areas
- Research needs
 - Maintain data sets from trawl surveys and the like
 - Safety
- Developer needs
 - Consistency
 - Permittable
 - Viable
 - Safety
 - Maintain value of lease
 - Business co-existence
- Additional
 - Adaptability for future change (development, fishing patterns)
 - Process
 - Wildlife impacts

Detailed Interests Charted in Smaller Groups

<i>Possible interest trying to meet</i>	<i>Category</i>	<i>Stakeholder</i>
To the extent possible, adopt a turbine layout consistent with existing fishing patterns	Consistency with existing fishing patterns and practices	Fishing
Maximize safety at sea	Safety	All
Provide necessary and, to the extent possible, alternative routes for passage during foul weather events	Safety	Fishing
Identify the shortest and most direct transit routes; (fuel, ice, time, product quality)	Efficiency	Fishing
Minimize travel time between ports and fishing grounds	Efficiency	Fishing
Select turbine layout and transit routes based on objective evidence; Clarify what counts as “objective evidence” used for decision-making (e.g., AIS, VMS, study	Process	All

fleets – tow by tow, local knowledge, VTR)		
Select transit routes which minimize transit through turbine arrays to the extent possible	Safety	Fishing
Optimize traffic patterns to minimize congestion and collision risk	Safety	All
Ensure access to historical fishing grounds	Access	Fishing
Promote efficiencies inside and between lease areas, complementary with future development	Efficiency	Developer, fishing
Maximize ability to fish in lease areas	Access	Fishing
Maintain margin of error by having wider corridors	Safety	Fishing
Avoid radar clutter/interference – size of turbines may have impact	Safety	Fishing
Ensure an east-west passage	Efficiency	Fishing
Respect existing/historic fishing agreements regarding fishing practices/operations	Consistency with existing fishing patterns and practices	Fishing
Each port can get through “the box” to their fishing grounds	Access, fairness between ports	Fishing
Minimize impacts to developers as well as fishermen (accommodate both interests)	Process	Fishing, developer
Address lost time, gear, other impacts of increased or different transit (addressed through mitigation)	Process	Fishing
Minimize impacts on wildlife (e.g., how handle right whales in transit lane? Acoustic impacts?)	Wildlife impacts	Wildlife/ research
Consideration for future development, not just current leases on the table	Future leases	BOEM, other developers
Use best practices from elsewhere, acknowledging that there will be differences	Process	All
Slow process to allow time to develop research and clarify outstanding questions	Process	Fishing
Access to historic fishing grounds, even when more leases are fully built out	Access	Fishing
Accommodate 2-way traffic and existing fishing practices. May be traffic impacts if active fishing in the lanes.	Access	Fishing
Lease areas are economically viable and permit-able	Project viability	Developer
Ensure lanes accommodate the diversity of gear type and fishing operations (mobile, fixed)	Access	Fishing
Address cumulative impacts on fishery (transit, environmental changes, fishing pressure)	Future changes, cumulative impacts	Fishing
Transparent, inclusive, and fair process for long-term relationships	Process	All
Business co-existence	Biz co-existence	All

Align specs with current turbine technology to ensure safety (USCG standard transit specifications have not matched new technology/size of turbines)	Safety	Fishing
Ability to evaluate impact of wind development on long-term NOAA surveys/assessments	Surveys/assessments	Research, fishing
Safety of fishing AND research vessels	Safety	Fishing, research
Maintain ability for fishing vessels to transit during farm construction	Access	Fishing
Get this right at the start – this will be here a long time	Process	All
Accommodate changing fishing patterns (mgmt., spatial-temporal, resources pursued, adaptive management) and future development, long-term optimization for all stakeholders	Future changes	All
Ensure consistency in markings/navigation aids	Safety	Fishing

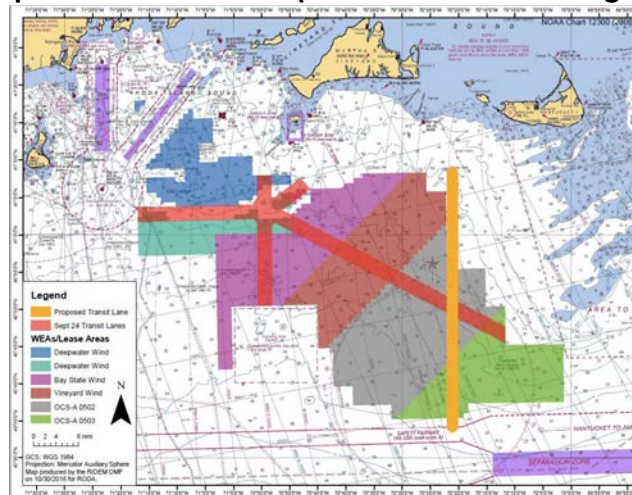
The following were comments raised in general discussion about these interests.

- Recognize the solution may not be optimal for each individual interest
- Recognize the dynamic nature of the fisheries (change is constant)
- Clarify fishing usage of the transit lanes
- Clarify how possible icing changes due to turbine presence (due to increased evaporation)
- Whatever lanes are agreed on, they should be proposed in a developer proposal to BOEM and be a condition of the permit to observe those lanes while constructing and operating the facility
- Fishing will be allowed in transit lanes as long as fishing vessels don't obstruct transiting vessels (this is already standard practice). Fixed gear shouldn't be in these lanes anyway but usually USCG doesn't address this unless it receives a complaint.
- These lanes don't just affect these 3 developers: they also affect 3 un-leased areas. What will happen if the lane goes through an un-leased area – how do we secure the lane in the future? *BOEM noted that it would require maintaining the lane as a condition of permit. It would make this agreement clear during its leasing process for the new lease sites. BOEM has made clear to developers and potential bidders that this conversation is going on.*
- These are recommended routes and not traffic separation schemes. The Coast Guard said a fishing vessel couldn't impede travel in the lane under standard practice. But do these rules apply to "recommended routes"? Would a fishing vessel lose its current right of way? *USCG stated that they would require additional enforcement and regulations. We hope that rules of road would apply to the lanes. But to enforce them, we would need additional federal regulations. So an accident, wouldn't be the fishing vessel's fault per the rules of the road now? Correct.*

Exploring Transit Route Options

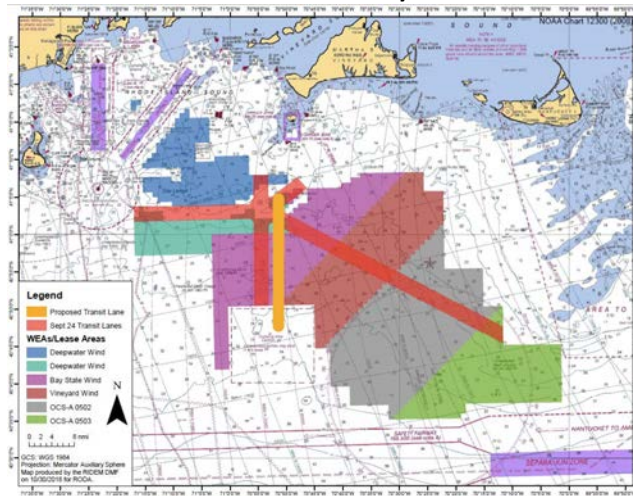
The participants, in small and large groups, then explored specific transit route options provided for discussion purposes by the facilitator. These routes included routes suggested in a 9/20/2018 meeting attended by many stakeholders and subsequent other options identified in individual conversations with parties prior to this workshop. The packet provided to participants is attached as *Attachment A*. The following are the pros and cons of the various individual transit routes identified through small group discussion. Please note that while the workshop broke the transit corridors into individual options for discussion purposes, ultimately, the transit lanes must work in a comprehensive fashion across the WEA as an approach in total.

Map 1: Eastern N-S lane (lane for discussion in “gold”)



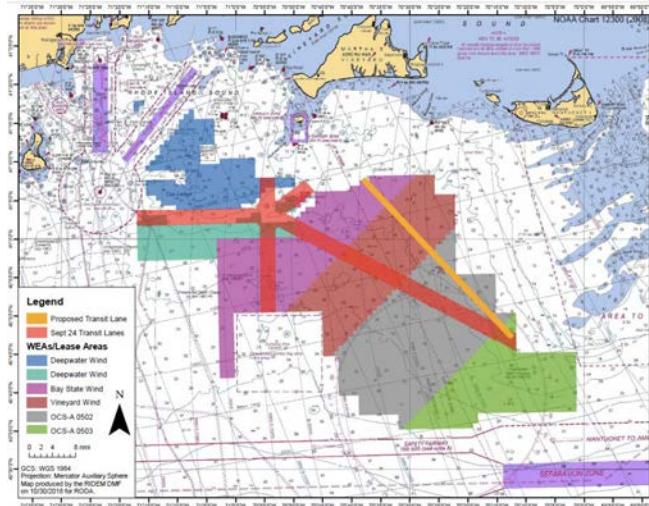
Pros	Cons
Avoids existing leases if east of 501(?) – does not impact current lease areas	May cut through lobster fishing area?
Minimizes transit through the arrays	Too narrow – want 4nm, extend 2nm to the west
Allows access to lobster/Jonah crab grounds	
Allows squid/whiting access	
Nav. Safety enters TSS at 90 degrees (?)	
May conform to E-W turbine grid layout	
Allows between island access	
Lane is an adequate width (though there are still concerns)	
Avoids the Nantucket shoals	

Map 2: Shift western N-S lane slightly to the east (contingent on extending it north through DWW lease)



Pros	Cons
Minimal impact to developers from shift – works within developer plans for lease development plans	Wider = better
More direct	Some concerns about Rotary plan remain
Would need to go around DWW lease	How would this impact fixed gear?
Allows fleet transit	

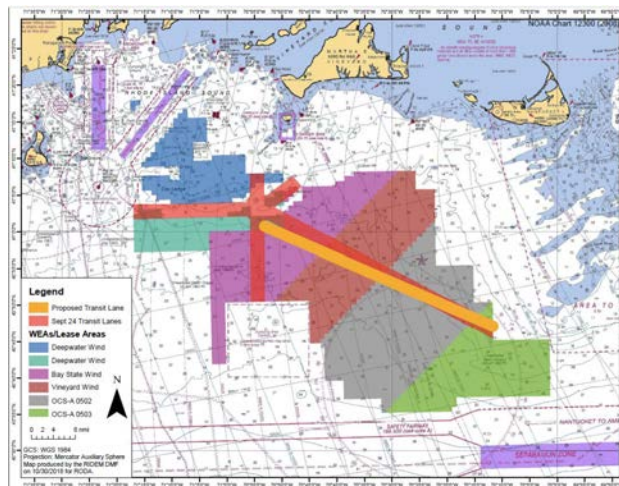
Map 3: NW-SE lane in the Northeast (shown at 1nm)



Pros	Cons
Shorter transit through the array for	Scallop fishery prefers not?

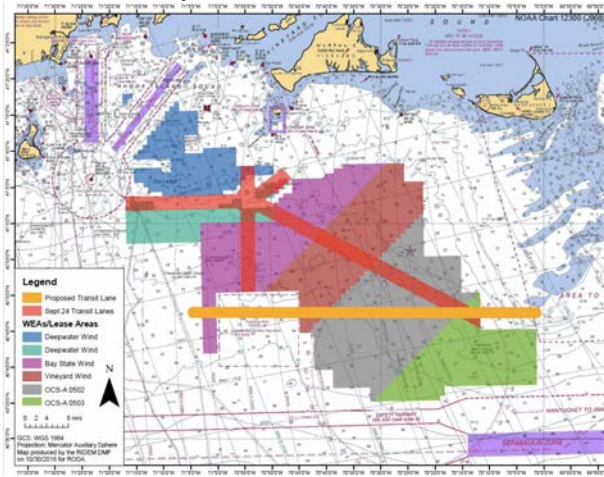
whiting, scallop, squid	
Shorter time spent in the array (less exposure to turbines because passing fewer of them)	Too narrow: 1nm would not allow safe transit so fishermen would not use this route, particularly in bad weather
2 developers are already committed to putting a lane here so reduces developer impact	Long transit for NY fishing vessels (slower to get home, more expensive, less safe)
Direct route to corner buoy for George's Bank	Would limit fishing in the lane because too narrow
Good for some ports (Newport and New Bedford)	
Utilizes an existing route (for New Bedford)	
Can serve as a fair weather lane	

Map 4: Shift northwestern terminus of NW-SE lane slightly southward, SE terminus remains the same



Pros	Cons
Slight increased benefits to Baystate, BWW, VW	Some jog may be required?
Consistent with developer plans which had time and resources invested in them	Need bigger rotary area – creates more congestion in the rotary, does not alleviate traffic safety concerns, if Map 2 not in place particularly
If Map 2 is in place, makes the Rotary less complex	Forces transiting fishermen through wind farms on long routes
Provides transit home for NY vessels	Impact on developers – impact to BSW's plans re: layout and sub-station, if combined with Map 2 may burden

Map 5: Southern E-W lane



Pros	Cons
Shorter distance through the array vis a vis northern E-W lane	More northerly route is more useful to fishermen
Less exposure to turbines than older route (transit fewer leases)	Still need to have a NW-SE route in place (for New Bedford, MA, RI)
Current developer benefit, less impact to BSW's plans and already-leased areas	Uncertain impact on future leases
Quick transit home to NY (but same distance as old route)	Increased traffic from the north if Map 3 does not exist
Reduces Rotary complexity	
A E-W route is important for NY to access fishing grounds	

Additional comments were made regarding the maps. These include:

- Prospective developers know what they're getting if we get this done now
- What analysis has been done re: impacts to whales and other marine resources?
- Most fishermen want to maintain rotary though developers are very concerned about it
- Can fixed gear be set in a lane?
- Hard to consider Map 5 w/o considering Map 3. They are linked.
- Other lanes should be considered (e.g., NW/SE through DWW) or will need mitigation
- Remember: many of these proposed lanes represent fishermen sacrifices already.
- Vessel size and number/frequency/duration of use related to traffic lane width
- SWNOMANS x-section: fixed gear conflict with traffic lanes, potential funneling effect
- Lanes at lease boundary will exist in the new lease areas

- Greater spacing will benefit fishing diversity
- What will be the turbine set-back from the lane?
- How will these lanes interact with future leases?

Post Caucus Discussion

At and after lunch the developers and fishermen caucused to explore these ideas further and determine if there was potential agreement among them. After caucus, the following comments and points were made.

The facilitator summarized his assessment of where things were given the day's discussion: 1) parties had a range of discussions with more clarity about likes/dislikes/why; 2) there is some agreement on E-W, N-S routes' 3) the diagonal lane(s) question remains a difficult one. The facilitator put forward the following ideas for moving forward:

- Form a small work group of fishermen, developers, BOEM, USCG for a limited period of time. Get additional technical information.
- See where to go next after that
- Goals of the work group: Agreement on width, final spatial layout, etc.
- Create a regional approach to these transit corridors
- Provide time for public input?
- Next steps: determine resources and people for technical group.

The following additional comments were made.

- Does the 9/20 agreement on corridors stand if we can't find additional consensus. *Yes, from the fishermen's perspective, although they add that the transit lanes should be 4 miles. From two developers' perspective, the 9/20 transit corridors in total are not acceptable.*
- In areas currently un-leased, do the developers have an issue with 4nm for eastern NS lane? *We talked about route, but not the width.*
- Agencies offered to support and encourage the process, especially with the upcoming Proposed Lease Sale Notice.
- The concern on the diagonal appears to center on the northwest portion given the infrastructure proposed in that area.
- Will BOEM hold off on the Proposed Lease Sale Notice until this is resolved? *BOEM will take this under advisement but there is no intent to delay the notice at this time.*
- It will be more effective to work in a small group, but it needs to be representative or we'll end up back where we started.
- For BOEM: If today we agreed on a particular route through the area that hasn't been leased yet, is there a process for BOEM putting into the lease process that there will be a lane or wait until lessee makes a proposal, or some other approach? What is BOEM's role here? *The stipulation in the leases now that says you have to adhere to transit corridors. We communicated that they can't develop transit corridors. If there is a consensus among users, we can incorporate it into the lease proposal. It would be a*

public process and would be open to comment and could be modified. It would also be subject to some level of approval in DOI. In the absence of consensus, it's hard for us to inform potential bidders on what the requirements will be.

- *Don't forget stipulations in the final notice for 1.5 km buffer on lease boundaries. We have built in transit lanes. Please note that the lease area SW separation zones – we discussed that industry wouldn't consider these transit lanes. We want to see NS lanes in addition to diagonal.*
- *Can RODA accept a transit corridor plan on behalf of the fishing industry? Do they have the authority to say "this plan will work" or can it only say "these are the fishermen concerns"? It's impossible to say what constitutes a "fishing industry consensus" on an issue like this. For items where we feel we can come to consensus, we will state that. The goal is to have the best possible outcome for the fishing industry overall. But this process takes time to get feedback from constituents. RODA will ask for stakeholder participation in fishing industry to participate in RODA conversations so we can solicit feedback by email and other means. We need to get input from those farther south too.*

Mitigation Plans Discussion

The participants concluded the day by sharing their views of what should be included in fisheries' mitigation plans generically (not specific to any one plan). The following comments were sorted by general themes in the conversation.

Avoidance, Mitigation and Compensation

- We need to distinguish clearly among avoidance, mitigation, and compensation. There's some confusion around this.
- First step from fishing perspective is avoidance. Transit lines, layout discussions are avoidance. Mitigation is #2. We are just starting this conversation of avoidance and it's been hard and taken awhile. So we are getting better – let's do a better job for #2.

Mitigation Considerations

- Mitigation starts with farm design/layout. More fishing access helps. Transit lanes help. So mitigation is happening at all times and levels. Doesn't just mean compensation. Also we need to think about how to contribute to the overall fishing community.
- Cause and effect – how attribute a change to wind farms, when conditions are changing rapidly already? Need to build resilience – how can we use resources to help us adapt? What structure would be most responsive to this? We need to take an adaptive approach since figuring out causality is so difficult.
- We want fish monitoring, mitigation, and compensation if necessary through all phases of a project.
- Need a monitoring program that gets baseline data of 5-7 years. We need to have this for our stock surveys too.
- Need a fair and transparent process.

- Need a long-term commitment to a comprehensive, regional research plan. E.g. growing scallop area. Fishermen, companies, and scientists need to talk about what research on a regional level is needed to study the long-term impacts.
- Mitigation is so complicated. We can't identify all the solutions today. Need to consider what the needs will be 20+ years down the road. Fisheries will evolve due to many pressures. Want to see this industry survive. We have many unanswered questions. RODA can start hosting this conversation between parties. Capacity is limited but these are starting points. One form of mitigation is putting low-elevation lights on turbines on lanes. Another is plotter markers and AIS options. But there are so many more that need to be discussed. Good to acknowledge that a few lanes have good agreement and we can keep working on the others.
- One sector of fishery may have different views from others. Think about the mitigation needed for different gear types – identify mitigation priorities and determine overall strategies.
- We want to fish. I think about loss of DAS, efficiency. How do you mitigate across community AND satisfy individual needs? Best mitigation is to allow us to fish.
- Will we be allowed to practice our fishing with mobile gear in the wind farms? I need to know this to have more opinions about mitigation –towers, cables, etc. Fishermen want to fish.
- If we snag on something in a farm or lose power – who is mitigating who for what?
- Want evidence-based, data-driven decisions. Want to hear how do we address these problems proactively? How structure and communicate this going forward?
- My company fishes for scallops and herring from VA to ME in federal waters. So the idea of agreements with states is helpful for some and not for others. There hasn't been a process that really works for mobile fishermen. What's been lacking is a structure for this conversation. We are starting to work in this direction with this meeting and needs to continue. Keep in mind that may need to look farther afield for stakeholders. BOEM has a role to play because this is federal waters.

Compensation

- We often start from top down but here, consider bottom up. Recently got request for help from fisherman with problems. There's a New Bedford group that helps fishermen in trouble. Could developers join a program or start a program to help fishermen in some sort of dire straits?
- We need to not be hurt in the first place. And, you need to think about impacts to shore side industry too. In the end, direct compensation for direct losses is needed.
- The goals should be long-term, community oriented benefits. RI doesn't have great access to healthcare for fishermen. We want long-term benefits for the RI fishing community. For instance, take interest and set up offices for navigators to provide tailored insurance programs.
- We shouldn't lose pay if we can't access an area because a survey is happening. At every step, should have options for how to address damages/losses. But shouldn't have many hoops to jump through or be forced to sign non-disclosure agreements to get

compensated. Compensation needs to be part of the package so we're not forced to lose money short and long term. Oil and gas has a small contingency plan, but this is a potentially bigger loss. Fishermen should not lose rights to the EEZ. Need fair compensation.

- Each fisherman will have different losses -- don't just do it off of average fisherman losses. Look at historic catches too.
- Where will the funds for compensation come from? Is there a shared pool model – a portion of wind farm revenues designated for fishermen – that could provide a long-term revenue stream for fishing industry? Divvying up the pool is a challenging decision but may have models in Europe to look like. A revenue sharing model should be considered.
- We want to come home safe, so “choice” is the wrong term. We will be limited by these farms, period. Cables and other infrastructure can become exposed by storms – need to know when this changes. In the RI regulations it says that an applicant had to pay as a condition of approval. We lose pay by being here – time is money. This cost should be borne by applicants.

Buy-Outs

- Support for a buyout. We're not going to survive the construction phase.
- I want to focus on discussion of buy-backs. Have been many mistakes made over the years. Want to hear some comments from fishing industry about how this could go badly. We don't want to get this wrong and want to hear what to avoid.
- Compensation should be on a community level, not pit vessels against each other in negotiations. Some boats being displaced will go fish elsewhere and need to discuss this at community level – losing resource because new fisheries are in your area.
- Previously – permits that weren't fishing anymore still got money. Think people should have to be actively fishing to get compensation. A buy out implies that person will no longer fish. But there are some who want to fish and need access to grounds! They should be compensated for lost access. So this makes issues with community funds – sometimes they go to grants for NGOs and the money doesn't filter down to community. Retraining is sometimes an option but not always. Whatever decision is made, think about who will be affected most, in fishing waters and where cables are going.

Next Steps

- RODA board will consider the idea of forming a small group to address this issue and the same goes for developers
- CBI will summarize this conversation in a meeting summary
- Those who signed up on the email list will receive updates on next steps in the coming weeks