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Talking points for offshore Wind Transmission Planning

I represent the surfclam and ocean quahog fishery (SCOQ) that operates in the Atlantic Ocean from VA to Mass but mostly off NJ, NY, RI and Mass. I would like to address some of the problems that the wind turbines and their power cables are going to cause.

- **The standard vessels use in the SCOQ fishery are typically 120 to 160 feet long with 1,000 to 2,000 HR towing a dredge (s) that are 5 to 7 tons empty, 15 ton full. The vessels have large pump system to wash the clam from the bottom powered by 800 HP engine delivering a 6,000 to 7,000 GPM pump at 100+ PSI through 8 to 12 inch hose attached to a manifold on the dredge (s). Each dredge is recovered by a winch, which typically had up to 80 tons single line pull.**
- **The vessels tow speeds range from a low of 2 to 4 knots.**
- **These vessels are designed to dig clams out of the bottom but are also effective of digging up most things on and in the bottom.**
- **On typical bottom the water jets dig a trench 15 feet wide and liquefy the bottom to one meter on the first pass.**
- **For years, the clam industry and the telecommunication trans-Atlantic phone cables operators had many interactions, which were immense problems for both industries. Clam vessels damaged the telecom cables and boat owners had gear loses and lost fishing opportunities with entanglement of the telecom cables.**
- **The telecom's wanted fishing vessels to stay at least one half a mile on either side of their cables. That was not reasonable because the clam industry was there before the telecoms, in many cases the cables had**

been laid in such a way that the owners did not know exactly where their cables were, and they did not want to tell the fishermen where they were. The telecom solution was to demand that a mile wide corridor be placed around each cable. They could not make such a demand. Fishermen have the right to operate in the federal zone as long as they have federal fishing permit (s).

- About 15 years ago, the NJ DEP, who issues the cable landing permits called a meeting of the telecom operators and the clam industry. The clam industry sent the three clam reps.
- This group met one day a month for around 18 months.
- The outcome was that the NJ State Legislature passed a law that spelled out what the cable companies had to do to get a permit to land a cable in NJ.

Some of the terms of the law are as follows:

- Cables must be buried to at least two meters in the bottom. We suggest at least two meters below the top of the cable.
- A third party surveyor must document the location of the cable.
- Every five years or after every major storm the location and designed depth must be confirmed.
- The telecom must provide a bond for removing the cable once the cable is removed from service. The clam fishermen believe that wind developers must put up a bond great enough to remove all of the turbines and cables from the ocean. Otherwise, the removal will not take place.
- Any cable that becomes uncovered must be re buried within a time certain.
- After any major storm, the cable must be surveyed to insure it is at the minimum depth which should be at least 2 meters deep above the cable.

When Governor Murphy took office said that the wind energy operators and the fishing must coexist. The fishing industry found that encouraging but it has not happened. To date the developers have not made any real concessions to fisheries.

What the fishing industry has learned from utilities it is too expensive to do what is request and therefore are completely opposed to any reasonable request/demand.

The developers of ocean wind energy are the industry of NO. They spend billions building and installing the wind farms with non US workers and charging the customers very high price for the power. They do harm the fishing industry with the design of their wind arrays and cable layouts.

The State of New Jersey must require that as few cables as possible land in the state. A backbone system that takes power from many developers to limit the cable landings is best. 800 GW arrays with many landings is not acceptable. The cables running from the arrays to landing point is going to also be a large hazard to the fishing industry. And the cable mats where one cable cross' another must be well marked and designed to not interfere with fishing gear.

The state would be well advised to review the ocean telecom landing law to use a reference point for enlighten ideas on what to require of the wind developers.