From:	todd guilfoos
To:	Jesper Christensen; Kellen Ingalls; Main, Robin L.
Cc:	Marisa Desautel; Jeff Willis; LANNY DELLINGER; David Ciochetto; Kevin Sloan
Subject:	FAB Response
Date:	Thursday, February 9, 2023 1:34:55 PM

Jesper- Thanks for the offer to engage more in this discussion even though there are differences in our numbers. You asked for more details behind some of the assumptions and numbers and I make an effort to clearly provide a reasonable justification for all the assumptions made in the Economic Analysis and have continued discussions with WHOI and your representatives. I only focus on the major differences in compensation:

-Regarding the discount rate. The WHOI analysis takes an extremely aggressive assumption on the discount rate for this project. Since the mitigation is for the purpose of paying claims over the next 30 years any funds will need to earn back the discount rate + inflation + service fees which are planned to be paid from interest. Therefore a 5% discount rate and long-term inflation of 2.5% plus service fees (maybe 1-2% of funds) would need to earn 8.5-9.5% returns. Most insurance companies that are set up to pay claims would invest 80% of their assets in fixed income due to the need to satisfy claims of different durations and optimize on riskiness of assets. These fixed income assets return between 3-6%, making total returns of closer to 6% on average. In my estimation the duration of claims past construction will significantly underfund the reserves for claims because of the compounded error in discount rate. A conservative estimate would use a discount rate of 3%.

-**Lobster and Crab** – We all know the limited data issues with lobster and crab through traditional reporting avenues. The estimate provided by WHOI for this species is too low based on three different data points. First, VMS data suggests a higher estimate based on the intensity of landings in Revolution WLA compared to VTR. As noted, coverage is low for lobster and Jonah, so I do not solely rely on VMS data in my original estimate. Second, ventless trap surveys in the Revolution area support the higher abundance of lobster and crab on a per trap basis and highly correlate with VMS and evidence from individual fishers. Third, in an informal survey of lobster boats on past average earnings from the Revolution WLA it is determined that the minimum exposure for the industry is $540,000 annually. All three data sources point to a higher estimate for this species, which will not be covered by the current offer. In an attempt to come to an agreement, I propose an estimate for lobster and Jonah of $600k based on the 4 data sources – VMS, VTR, Ventless Trap surveys, and Survey of lobster boats.

Following the guidance from BOEM published June 23, 2022 recommends a **MINIMUM** of operation compensation based on the following.

-Commercial fisheries.

"BOEM recommends that, at minimum, lessees consider the following payment structure be available for claimants: 100 percent of revenue exposure for the first year after construction, 80 percent of revenue exposure 2 years after construction, 70 percent of revenue exposure 3 years after construction, 60 percent after four years, and 50 percent after five years post construction. Compensatory mitigation beyond 5 years post-construction may be necessary and should be evaluated based on the activities proposed in the COP."

We note the current offer from Orsted is well below this minimum.

We apply these estimates of impact for the first 5 years post construction. After 5 years I estimate loss of land that will result in claims for fixed gear fisherman. Before construction I estimate that fixed gear fish on 192 km^2 within the Revolution WLA. After wind turbines are built I estimate between 108 to 51 km^2 will be lost in the east to west lanes that do not contain turbines. I also estimate between turbines a potential gain of new ground of between 17 to 9 km^2, though this new ground is highly uncertain as it depends on room for boats to operate between turbines and between trawling lines that may be too risky. Using a uniform distribution of events this equates to

a 34.9% loss of ground applied to fixed gear. This in addition to the 5% lost to turbine area is used for post 5-year construction effects.

Using 2022 dollars this equates to **$21.8M** for commercial fishing impacts.

-Charter fisheries.

Following the BOEM guidance for charter fishing results in a **$1.9M** loss without additional losses for big game fishing that we expect for operations. Note our original offer was for less than the BOEM minimum.

-Recreational fisheries.

Following the BOEM guidance for charter fishing results in a **$1.4M** loss without additional losses for big game fishing that we expect for operations. Internally we have surveyed private recreational anglers who indicate that over 60% of anglers fish large pelagic fish in the wind area and that there will be a drop in visitation during operations of approximately 28% due to the wind farm. This drop is due to the difficulty in fishing these species in a wind turbine array as indicated by the FAB experts.

This results in Total Compensation of **$25.1M**

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Todd