**Technical Review of Baseline Value and Impact Reports for Revolution Wind Export Cable Corridor in Rhode Island State Waters**

Steve Cadrin

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I am a Professor of Fisheries Oceanography at the University of Massachusetts School for Marine Science and Technology. I have a PhD in Fisheries Science from University of Rhode Island, a MS in Marine Biology from University of Massachusetts, and a BS in Marine Science from Long Island University. My teaching research agenda is focused on fishery stock assessment and fishery management. I have been using fishery monitoring data for decades to support stock assessment and fishery management decisions. I am currently involved in collaborations to use fishery monitoring data to evaluate exposure to offshore wind energy areas, estimating impacts of offshore wind development on fisheries, and providing baseline information on cod spawning dynamics in wind energy areas. I also teach a graduate course on Offshore Wind Energy and Fisheries. A CV is attached with more information.

I reviewed two technical reports by Hauke Kite-Powell and Di Jin, from the Marine Policy Center of the Woods Hole Oceanographic Institution:

1. Baseline Value of Commercial Fisheries Landings from the Revolution Wind Export Cable Corridor in Rhode Island State Waters
2. Fishery Impacts from the Revolution Wind Export Cable Corridor in Rhode Island State Waters

Background information was also provided on the Revolution Wind Construction & Operations Plan filed with BOEM, Rhode Island, and Massachusetts. A draft Baseline report was reviewed in March 2022, a revised Baseline report was reviewed in June 2022, and the draft Fishery Impacts report was reviewed in August 2022. The authors responded to questions and requests for information in a series of video conference calls. I compliment the authors for their open discussions and responsiveness. I think the peer review and responses improved the analysis and documentation.

From my familiarity with current best practices for estimating fishery value in offshore wind energy lease areas or cable corridors and fishery monitoring systems, I think the reports provide the best scientific information that is currently available. I recognize that fishery monitoring systems were not designed to estimate value for relatively small areas, and data quality varies widely among fisheries and areas. However, the available fishery monitoring data is the most appropriate information that is currently available to estimate baseline value of fisheries in offshore wind energy areas.

The general approach of estimating economic exposure as the product of spatial revenue density (i.e., $\$/km^2$) and impact area (lease area and cable corridor area) is consistent with technical guidance and supported by NOAA data products (e.g., DePiper 2014). Specific data and analytical decisions were well justified, particularly providing values by fishery and fishery-specific adjustments. For example, accounting for under-reported landings of lobster and Jonah crab in vessel trip reports is appropriate for the considerable portions of those fisheries that do not have mandatory logbooks. The online survey of Rhode Island and Massachusetts for-hire recreational fisheries, with 91 responses, also helps to supplement the available data. Providing information on interannual and seasonal variability as well as inter-annual price adjustments improve understanding and applicability of the impact assessment. The

assumption of no displaced fishing effort from lost fishing opportunities in the lease area or cable area is a simplification that probably produces an overestimate of the actual economic impact.

The estimates of baseline value are supported by the information available. Analytical decisions were reasonable and well justified based on properties of the available information by fishery. The range of estimated values accurately reflects uncertainty in the available data and analytical assumptions.

Reference

DePiper, G.S. 2014. Statistically assessing the precision of self-reported VTR fishing locations. NOAA Technical Memorandum NMFS-NE-229. https://repository.library.noaa.gov/view/noaa/4806