May 9, 2023

Testimony of Gary S. Dorfman to the Coastal Resources Management Council

re: Federal Consistency Determination for CRMC File 2021-06-029 Revolution Wind, LLC Coastal Zone Management Act consistency certification; offshore wind energy facility in federal waters

Dear Council Members,

I am providing this testimony regarding the Federal Consistency Determination for Revolution Wind (CRMC File 2021-06-029 Revolution Wind, LLC Coastal Zone Management Act consistency certification; offshore wind energy facility in federal waters) with the request that the Coastal Resources Management Council (CRMC) vote to deny Federal Consistency for this application. There are numerous reasons to support my request that the CRMC deny the proposed determination of consistency including, but not limited to, 1) the lack of well-documented benefit toward the important and laudable goals of decarbonization and mitigation of climate change, 2) the endangerment posed to marine mammals and biodiversity, 3) the long-term adverse impacts on commercial and recreational fishing, 4) the likely negative impact on the State's tourism industry, and 5) the loss of world-class vistas from public beaches with resultant harm to all those who seek refuge there. Instead, I will focus on one additional and very important reason to deny consistency as hereafter described.

Specifically, there are expectations that 1) during Revolution Wind's operational lifetime the equipment will be properly maintained and 2) at the end of the operational lifetime the project will be decommissioned in a manner that returns all of the areas affected by the project to their pre-existing natural state. Such expectations demand a realistic and fully budgeted plan to support such activities; and approval by the CRMC implies that there is a guarantee of funding adequate to carry out such plans. Without carefully described and fully funded maintenance and decommissioning plans, these expectations are merely "hopes." Furthermore, there is an expectation that as part of the Bureau of Ocean Energy Management (BOEM) permitting process that "the applicant shall provide an acceptable decommissioning plan and post surety sufficient to accomplish the plan as approved."

The Construction and Operations Plan for Revolution Wind (COP) on page 187 of 835 states the following regarding decommissioning:

## "3.6 Decommissioning

At the end of the Project's operational life, it will be decommissioned in accordance with a detailed Project decommissioning plan that will be developed in compliance with applicable laws, regulations, and BMPs at that time (emphasis added). All facilities will need to be removed to a depth of 15 ft (4.6 m) below the mudline, unless otherwise authorized by BOEM (30 CFR § 585.910(a)). Care will be taken to handle waste in a hierarchy that prefers re-use or recycling, and leaves waste disposal as the last option. Absent permission from BOEM, Revolution Wind will complete decommissioning within two years of termination of the Lease. Revolution Wind will develop a final decommissioning and removal plan for the facility that complies with all relevant permitting requirements. This plan will account for changing circumstances during the operational phase of the Project and will reflect new discoveries particularly in the areas of marine environment, technological change, and any relevant amended legislation."

There is no allowance that Revolution Wind may proceed as they propose in the COP. Providing a plan as part of the permitting process (which is the expectation) is not the same as providing a promise to

someday submit a plan (which is what the COP states). There is within the O-SAMP and BOEM regulatory language the opportunity for alternative decommissioning plans to be considered at the time of decommissioning. However, there is no language stating that a baseline plan is not expected before approval; in fact, the opposite is stated, a plan is expected before the fact. There is similarly promissory and vague language regarding the decommissioning of the onshore interlink facilities. And throughout the COP there are numerous references to repair of wind turbine generators (WTGs), offshore substations, interconnect cables, and power export cables among other aspects of the operation. All without even the most cursory budgetary estimates to accomplish the promissory and vague description of such aspirational goals. These do not represent actionable plans.

There are no concrete and specific plans for either maintenance or decommissioning and there are no concrete and specific budgetary plans to accomplish these activities. Most worrisome is the complete lack of the required decommissioning plan that MUST be submitted to the BOEM as part of the permitting process inclusive of a realistic budget to accomplish the necessary decommissioning activities. Should an alternative plan for decommissioning be submitted and approved at some future date (presuming consistency with both the then existing O-SAMP and BOEM regulations), budgetary adjustments might be in order at that time. However, there should be some guarantee that the required decommissioning goals and objectives are met by a clearly defined plan and that there are adequate funds on hand to accomplish that plan in advance of determination of consistency and permitting.

Mr. Ken Bowes of Eversource in sworn testimony provided to the Public Utilities Commission and included by reference in its Advisory Opinion (8-26-2021) stated that "the required decommissioning plan with budget and evidence of surety bond would be provided to BOEM as part of the permitting process." He did not state in his testimony that the required decommissioning plan would consist of a promise to submit such a plan at some later date. And absent a well-defined decommissioning plan, it is impossible to determine the magnitude and sufficiency of the required surety bond to cover the costs of decommissioning.

Recent reports in the industry and lay press as well as critical analyses by energy economists (even those dedicated to renewable energy sources) reveal that the economics of offshore wind are not robust, to say the least. Additionally, the vagaries of energy rate-setting and power purchase agreements do not provide a reliable and predictable source of funds sufficient to cover the ongoing costs of maintenance especially during the out years when repairs will become more frequent and more costly. This is further compounded by the highly political nature of tax credits and RECs that might be rescinded at any time, as evidenced by the current debt-ceiling limit and budget negotiations taking place in Washington, DC. Furthermore, reports from the insurance and re-insurance industries document increased frequency and magnitude of claims for WTG damage (both on land and offshore, both in the US and worldwide). These claims are projected to increase yet further with physically larger and greater capacity WTGs. In addition, there are reports that Eversource is exploring the potential for selling off its interest in Revolution Wind and potentially other offshore wind projects. I have no idea whether or not such reports are true or whether or not Eversource will be successful in so doing, should the reports be correct. And of course, let's keep in mind that Revolution Wind is established as a Limited Liability Corporation (LLC, emphasis on the words limited liability) by its organizers. However, there is in fact no limit to the liability that might be incurred by the beneficial owners of the natural resources upon which Revolution Wind is being constructed – those beneficial owners being the citizens of Rhode Island and the United States.

Therefore, unless and until the public and members of the CRMC are provided concrete, budgeted plans for maintenance of the facilities during operation and more importantly for decommissioning at the end of the project lifetime, it is impossible to support consistency with the O-SAMP and Federal guidelines. The public and the CRMC, in fact, have no idea exactly what and how Revolution Wind intends to maintain the WTGs, interconnect cables, transfer substations, power export cables and other aspects of the project and whether or not there will be funds available for such operational maintenance activities on an ongoing basis. And the public and CRMC, in fact, have no idea exactly what and how Revolution Wind intends to decommission all aspects of the project so as to return the impacted natural resources to their previous natural condition and whether or not there will be sufficient funds available for such decommissioning activities at some future date, as yet to be determined.

Given 1) the nature of Revolution Wind's ownership and finances and its LLC status, as well as 2) the tenuous nature of the economics of off-shore wind, and 3) the increasing costs for insurance and reinsurance associated with wind energy more generally, it is mandatory that hard fiscal guarantees be in place prior to certification of consistency with the O-SAMP even should Revolution Wind be able to provide concrete and specific plans (with budgets) for maintenance and decommissioning. Specifically, a surety bond based on today's projected costs for decommissioning in two or three decades from now has a very high likelihood of insufficiency. And there is at least some likelihood that Revolution Wind at the end of this project's lifecycle may have insufficient available funds and assets to cover the cost of decommissioning. In fact, there are no guarantees that should off-shore wind prove less profitable than anticipated by the current and/or future shareholders of the LLC, that there even would be funds available to properly maintain the facilities during the lifetime of the project. Therefore, any certification of consistency should include legally enforceable financial guarantees jointly and severally by the Revolution Wind owners (at this time Ørsted and Eversource) and their successors in addition to the prerequisite surety bonds (and perhaps further guaranteed by a substantial fully-funded escrow account) so that during the project lifetime and at the time of decommissioning the citizens of Rhode Island and the United States won't be left with rusting, leaking, non-functional WTGs and offshore substations as well as a network of potentially dangerous cables on the sea floor; eyesores and environmental disasters, as the everlasting monument to this overly ambitious, but currently underfunded, experiment.