

March 13, 2017

The Massachusetts Department of Energy Resources  
The Massachusetts Office of the Attorney General  
Fitchburg Gas & Electric Light Company d/b/a Unitil (“Unitil”)  
Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid  
NSTAR Electric Company and Western Massachusetts Electric Company d/b/a Eversource  
Via Email to: marfp83C@gmail.com

Re: Issues for Stakeholder Comment

Dear Soliciting Parties,

Anbaric Development Partners, LLC is pleased to submit stakeholder comments to assist you in the development of a request for proposals for the competitive solicitation of bids to enter into cost-effective long-term contracts for Offshore Wind Energy generation pursuant to Section 83C of Chapter 169 of the Acts of 2008, as amended by Chapter 188 of the Acts of 2016, *An Act to Promote Energy Diversity*.

Anbaric Development Partners, LLC (ADP) is a company formed by Anbaric, an independent developer of electric transmission and microgrid projects with offices in Wakefield, Massachusetts, and the Ontario Teachers’ Pension Plan (OTPP). Anbaric has helped spearhead development of two 660 MW HVDC transmission systems in the Northeastern United States. OTPP is Canada’s largest single-profession pension plan with over \$171 billion in net assets.

ADP will address questions 4 and 7 focused on the impact of transmission costs of offshore wind on Massachusetts ratepayers. We make three inter-related points.

First, we believe that the most cost effective way to develop offshore wind at scale is to develop a transmission system at the same scale. For the reasons we describe below, developing off-shore wind at scale while allowing for the unplanned, piece-meal development of transmission is likely to yield a costly, duplicative transmission system and unnecessarily costly generation.

Second, we recommend that the development of transmission and generation be separated and that entities be allowed to compete for the transmission and generation components with costs of each identified. As we describe below, ratepayers are served when costs of transmission and generation are set forth separately and transparently and when time-honored principles of competitive public procurements are permitted to govern the purchase of these goods and services. The separation of costs and separate bidding are especially harmful when industry norms and grid limitations allow

a first mover in generation to select a transmission system that could exclude subsequent entrants or make their entry cost-prohibitive. Such a system would not be in the public interest.

Finally, to achieve Section 83C's 1,600 MW goal of aggregated nameplate capacity, this RFP should be conceived and structured as the first step to meet that larger goal. More specifically, this RFP should seek a plan to meet that goal and require a staged approach from generation and transmission respondents to achieve that goal in the most cost effective way beginning in the initial procurement and extending to future ones.

Here's how these proposals would function together.

To achieve Section 83C's goals, transmission and generation should bid separately. Joint bids should be allowed but not required; costs of the transmission system and the generation component, the wind farms, should be identified separately and the RFP should allow the Commonwealth to select the best transmission proposal and the best generation proposal regardless of whether each was bid with the other.

Each transmission bidder should be required to provide standalone estimates for the cost of transmission from the location of the wind farm array to the onshore interconnection substation. Simultaneously, as part of the bidding, the RFP should allow transmission developers to bid common carrier transmission systems from a common interconnection point offshore to a point of interconnection onshore. The RFP evaluators should then take the wind generators' collective cost estimates for the transmission component of their bids and compare them to the cost proposed by the transmission developers for the common carrier offshore trunk facility. If the transmission developer's trunk transmission line costs less than the wind generator's transmission line, then the transmission developer's trunk line should be selected as the method of connecting the wind energy to the grid.

This approach to evaluating the transmission components of offshore wind bids and comparing their total cost to the cost of a single offshore transmission-only bid allows a comparison of transmission systems and selection of the optimal system. It also has the benefit of introducing competition to the transmission component, as well as easing the transmission burden on the wind developers, thus providing additional benefit to ratepayers.

Of course, developers of offshore wind may argue that the separation of development of wind projects from transmission exposes the ratepayer to project-on-project risk. No one wants a transmission system without wind turbines or the latter without the former. The only way to avoid this risk, some will argue, is to have the generator responsible for developing both aspects of the project.

But this argument suffers from two flaws. First, it misunderstands the nature of the challenge. Section 83C seeks 1600 MW and that scale calls for a transmission system, not a cable to a discrete wind farm. At that scale, a transmission system needs to be designed, it cannot simply consist of

an amalgamation of uncoordinated generator cables. There is no need or justification for duplicative transmission cables in the ocean any more than there is for such transmission lines on land. Moreover, joining generation and transmission allows the former to earn monopoly profits on the latter.

Second, the argument glosses over commercial reality. Even if one entity develops transmission and generation, there remains project-on-project risk. With a project of the scale and complexity of offshore wind at 400MW or 1000MW, the risk of timing the development of transmission and generation is embedded in the nature of the enterprise. There is no magic way to avoid project-on-project risk in such a circumstance. Indeed, there is a natural alignment between the transmission developer and generation developer. Therefore, it is not necessary for them to both be owned by the same entity. The only way transmission can be successful is by having the generators succeed. The converse is also true. This alignment is very achievable through commercial contracting. Further measures to identify a competent and experienced team, set milestones for each team member, and demand constant communication are also essential.

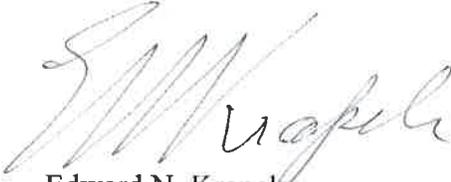
In summary, separating generation and transmission and requiring developers to separately identify the cost of transmission will benefit ratepayers and help the Commonwealth achieve its 1,600 MW goal.

- 1) It allows wind energy prices to be compared with wind energy independent of the transmission costs.
- 2) It introduces competition to the transmission component of the bids, including competition from companies that specialize in transmission-only development, thereby avoiding the re-entry of the region's transmission companies into the generating business, as is currently contemplated.
- 3) It prohibits generators from building or controlling associated transmission and exercising monopoly power.
- 4) It reduces risk by spreading it over separate owners.
- 5) It offers the ability to choose energy from more than one wind developer by combining their energy on a single line, thus accelerating the pace at which the 1,600 MW goal can be met.
- 6) It reduces the impact on the ocean environment by enabling the development of one or two trunk transmission systems as opposed to numerous and possibly redundant or competing smaller transmission lines from individual wind farms to multiple onshore substations.
- 7) It makes more efficient use of onshore interconnection points by reducing the number of interconnections.
- 8) It places the transmission cost risk directly on the transmission developer and away from the ratepayer.

For all these reasons, ADP urges you to separate transmission and generation and allow transmission developers to bid for the transmission portion of the offshore wind solicitation.

ADP thanks you for your consideration of these comments and looks forward to issuance of the RFP.

Best regards,



Edward N. Krapels  
Chief Executive Officer