

August 19, 2010

Mitchell M. Tannenbaum,
Deputy General Counsel
State of Maine Public Utilities Commission
18 State House Station
Augusta, Maine 04333-0018

RE: LD1810 Power Purchase RFP for Deepwater offshore wind.

Dear Mr. Tannenbaum:

Per your letter dated July 28, 2010, the University of Maine is providing the following written comments on items that should be taken into consideration in the development of the "Request for Proposals" (RFP) for the development of up to 25 MW installed generation capacity for deep water offshore wind per recently passed state legislation LD1810.

The University of Maine recommends the following information be taken into consideration.

PART I. Proposals from developers shall be evaluated using the following criteria:

1. **PLANS FOR LARGER 300-1,000MW FARM.** Detailed plans to expand the 25 MW pilot project into a 300-1000 MW-scale farm, preferably by 2020. Provide location of expanded farm, schedule and plans for transmission and grid integration. It is recognized that the first 25 MW deepwater project is too small to scale, and therefore, cost reductions and economies of scale will not be achieved until the project size reaches the 300MW-1,000 MW range.
2. **PLANS BEYOND THE FIRST 1000MW.** The intent of LD1810 that generated the 25 MW pilot project is to spur the creation of long-term manufacturing and renewable energy jobs in Maine related to deepwater offshore wind. Therefore, proposals should provide plans for expanding deepwater offshore wind off Maine not only beyond the first 25 MW pilot project, but also beyond the first 1,000 MW installation. Therefore, the proposals should provide details of how they will further the Governor's Ocean Energy Task Force recommendations of reaching 5 GW of offshore wind by 2030, as the intent of the law is to create long-term manufacturing jobs in Maine. The pilot 25 MW project was intended to become the catalyst for these long-term activities.
3. **EXPERIENCE.** Experience in developing offshore wind facilities, and experience in working in the offshore wind industry; experience in working in offshore environment; experience working in energy generation.
4. **FINANCIAL STRENGTH.** Financial strength and ability – financial capacity to do the 25 MW pilot farm as well as the larger 300-1000 MW project, and beyond.

5. MAINE MANUFACTURING PLANS. Plans for developing a Maine supply-chain to support the 25 MW scale project and the larger 300-1,000MW project including: (a) the use of existing Maine businesses and (b) planned investments to expand Maine manufacturing facilities, including platform components, turbines, blade, foundation, and maintenance facilities to allow Maine to become a world leader and an export center for floating deepwater offshore wind technology.
 - a. What components will be manufactured in Maine: Towers, blades, foundations, turbines
 - b. What components will be assembled in Maine
 - c. What sites will be used for lay down, assembly, and erection.
 - d. What sites will be used for operations and maintenance
 - e. Which port facilities will be used for shore side staging and/or O&M
 - f. Which tow-out routes will be used from port to farm location

6. ESTIMATES OF JOBS CREATED IN MAINE. Provide estimates of direct job creation in Maine and for both the 25 MW pilot and the larger 300MW-1,000MW project and beyond. Related to above Section (5), provide the following information over the next 20 years:
 - i. Jobs supported/created in the proposing company in Maine
 - ii. Jobs supported in sub-contractors and supply-chain companies
 - iii. Jobs for operations and maintenance

7. LEVERAGING OF UMAINE RESOURCES AND EXPERIENCE. Show cooperation and agreements with the University of Maine on siting, floating platform design and testing, R&D, metocean condition assessment, monitoring, and environmental assessment. Such agreements will further enhance probability of success of the pilot project and build on work already accomplished at UMaine. UMaine has recently been selected by DOE to lead deepwater offshore wind R&D in the US under a national competition. The successful proposal needs to show how it will build on \$12 million of work already funded by the DOE at UMaine, in order to help reduce project risks, and to reduce the costs of development, installation, and ultimately price of electricity to the Maine consumer. The successful developer needs to show how they will take advantage of a world-unique \$22.4 Million offshore wind research facility being constructed at UMaine, funded in 2010 through a national competition conducted by the National Institute of Standards and Technology and also, through a State of Maine competition.

PART II. Schedule

Please keep the RFP open for at least 1 year to allow developers to collect the data needed for properly siting a project off the coast of Maine. Under DOE funding, UMaine is collecting critical environmental, geophysical, grid connectivity, assembly sites, metocean, and supply chain information that will be provided to developers. This information will be released by UMaine in multiple parts in the November 2010- August 2011 timeframe as it becomes available. A developer will require millions of dollars to generate the same information alone. Therefore keeping the RFP open for one year will be critical so that all developers receive the necessary information needed to insure a successful project.

The time frames included in the RFP and schedules should be further coordinated with Karin Tilberg, Office of Governor Baldacci, and her current work to develop the Maine Deep-Water Wind Energy Pilot Project. The Maine Deep-water Wind Energy Pilot Project will

develop and implement a streamlined, three-year process for environmental review and siting of advanced, deep-water wind energy technologies deployable at depths of approximately 100 meters.

The fundamental goal of this pilot project is to model a process where the Bureau of Ocean Energy Management, Regulation, and Enforcement's (BOEMRE) final decisions on all authorizations and approvals, including lease issuance and approval of project-specific site assessment plans, and all other applicable federal and state environmental reviews and approvals, are made and completed within three years from the date that the MMS either: (a) makes a determination of no competitive interest in an RFI; or, if competitive interest is identified (b) selects a potential lessee through its competitive process. Assuring that the RFP schedule is consistent with the above pilot project is imperative for the success of this process. In addition, since permitting (federal, state and local) is a critical path element we recommend that no final contract be issued until all permits are obtained or a clear timeline for obtaining a permit has been provided.

Please do not hesitate to contact us if you need any additional information or clarification on the above.

Sincerely,



Jake Ward
AVP Research, Economic Development and Government Relations



Habib Dagher
Ph.D., P.E.; Director, AEWAC Advanced Structures and Composites Center.