

## United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT WASHINGTON, DC 20240-0001 APR - 9 2018

Mr. Thomas Brostrøm Bay State Wind LLC One International Place 100 Oliver Street, Suite 2610 Boston, Massachussetts 02110

Dear Mr. Brostrøm:

I am writing on behalf of the Bureau of Ocean Energy Management (BOEM), Office of Renewable Energy Programs (OREP) regarding Bay State Wind LLC's (Bay State Wind) regulatory departure request submitted pursuant to 30 C.F.R. § 585.103 on August 1, 2017, resubmitted with corrections on August 25, 2017, and with additional information on October 12, 2017. Through this letter, BOEM approves Bay State Wind's request to submit its detailed geotechnical data after approval of a Construction and Operations Plan (COP), but prior to construction, with its Facility Design Report (FDR), and conditionally approves its request to depart from the requirement that the Lessee submit with its COP the results of adequate *in situ* testing, boring, and sampling at each foundation location.

On August 1, 2017, Bay State Wind LLC (the Lessee) submitted a request for a departure from 30 C.F.R. §§ 585.626(a)(4)(ii) and (iii), which require that a COP include: (1) the results of adequate *in situ* testing, boring, and sampling at each foundation location; and (2) the results of a minimum of one deep boring (with soil sampling and testing) at each edge of the project area and within the project area as needed.

As an alternative to the requirements contained in 30 C.F.R. §§ 585.626(a)(4)(ii) and (iii), the Lessee proposes to select boring locations based on engineering needs, as well as the results of the geophysical and geotechnical reconnaissance surveys and associated ground model that have been conducted and developed to date throughout the Lease and Phase 1 Development Areas. The Lessee proposes to share the boring locations with OREP, which would verify that they are representative of the Project site. The Lessee represents that the information obtained from the selected locations would meet BOEM's needs for purposes of COP review.

Additionally, the Lessee requests BOEM to allow it to conduct and submit the results of the surveys described in 30 C.F.R. §§ 585.626(a)(4)(ii) and (iii) after COP approval, but prior to construction, as part of the required FDR. The Lessee proposes that if it finds that the ground conditions are homogenous across the area, it would determine the location (and number) of borings on the basis of the data collected as well as its geologic ground model.

On August 31, 2017, OREP requested that the Lessee submit additional information to support the departure request, including the results of the completed geotechnical and geophysical reconnaissance surveys referenced in the departure request; a description of the proposed project foundations that would be included in the COP; information regarding the geologic ground model developed so far; and the specific depths of penetration for the geotechnical surveys were, at that time, proposed to be conducted in November 2017. The Lessee responded on October 12, 2017, and proposed to convene an in-person meeting with OREP to present the results of the surveys undertaken to date, the geologic ground model, and its proposed foundation types.

On November 3, 2017, the Lessee met with OREP and presented the results of its geotechnical (GT1A) and geophysical (GP1A) reconnaissance surveys undertaken to date, its geologic ground model developed to date, and its strategy for the proposed detailed geotechnical site investigation campaigns (GT1B and GT2) and for selecting proposed foundation types. Based on the information presented, OREP requested a list of additional information for review, including:

- A geologic ground model and site geology narrative;
- Data results from the GP1A high resolution geophysical survey and preliminary data products including: bathymetric, side-scan sonar, sub-bottom profiler, high resolution seismic, and magnetometer data, isopachs, and preliminary geologic interpretation of both surficial and subsurface hazards and features;
- Data results from the GT1A geotechnical investigation, including the boring location plan, logs of borings and cone penetrometers, laboratory test results, geotechnical soil profiles; and
- Proposed GT1B and GT2 investigation narratives.

OREP received this information electronically on December 21, 2017, reviewed it, and determined that the investigation results that the Lessee intends to include in its COP would be sufficient to facilitate BOEM's COP analysis, which will include a thorough assessment of sediment conditions, preliminary foundation recommendations, and assessment and mitigation of geologic hazards. OREP has determined that the data results from the GP1A and GT1A investigations, the Lessee's plans to collect additional data from the GT1B and GT2 investigations, and the narratives describing the geologic ground model and site geology are sufficient for BOEM to grant a departure from 30 C.F.R. §§ 585.626(a)(4)(ii) and (iii).

BOEM also approves the Lessee's request to select boring locations in consultation with BOEM and based on engineering needs, results of surveys undertaken to date, and the geologic ground model—on the condition that the Lessee conducts an investigation at each foundation location as described in its GT1B and GT2 narratives. BOEM reserves the right to request additional survey data if the reports submitted with the Lessee's FDR is less comprehensive than what is described in those narratives.

Notwithstanding this departure, the Lessee's site investigation report submitted with the COP pursuant to 30 C.F.R. § 585.626(a)(6) and derived from the Lessee's GT1A and GP1A surveys must demonstrate to BOEM's satisfaction that the proposed foundations are feasible and that geologic hazards can be mitigated.

BOEM finds that the requested departures would facilitate appropriate lease activities in accordance with 30 C.F.R. § 585.103(a)(1) by providing the Lessee with the flexibility to

conduct its geotechnical surveys in stages as the level of detail of its project design increases, and to allow the Lessee to submit a COP for BOEM's review and approval before finalizing its project design.

BOEM also finds that the requested departures comply with 30 C.F.R. § 585.103(b). Because the Lessee would not be able to commence construction activities until BOEM has had an opportunity to review the data from the GT1B and GT2 surveys, this departure is consistent with subsection 8(p) of the Outer Continental Shelf Lands Act and protects the environment and the public health and safety to the same degree as if there were no approved departures. The departures also do not impair the rights of third parties.

Please contact Ms. Jessica Stromberg at jessica.stromberg@boem.gov or 703-787-1730 if you have any questions.

Sincerely,

/James F. Bennett Program Manager Office of Renewable Energy Programs