Jill Aspinwall
New Jersey Department of Environmental Protection
P. O. Box 402
Trenton, NJ 08625

October 23, 2020

VIA EMAIL: Jill.Aspinwall@dep.nj.gov

RE: NJ PACT Stakeholder Meeting September 23, 2020
Ocean Wind Comment Submission

Dear Ms. Aspinwall:

Ørsted, which is developing the Ocean Wind offshore wind project, appreciates the opportunity to provide written comments related to offshore wind and the New Jersey Protecting Against Climate Threats (NJ PACT) initiative. Ørsted supports a targeted regulatory reform effort by the New Jersey Department of Environmental Protection (NJDEP) to modernize environmental laws and accelerate a smooth transition to a clean energy economy.

Although offshore wind is a relatively new technology in the United States, Ørsted has experience developing, constructing, and operating offshore wind farms in other parts of the world since 1991, and has installed more offshore wind turbines than any other developer. Ørsted operates America's first offshore wind project in Rhode Island and constructed the first turbines in federal waters, in Virginia. Ørsted looks forward to constructing the nation's largest offshore wind project here in New Jersey.

Offshore wind is the only form of renewable energy that can be deployed at utility scale in New Jersey. Governor Murphy's Executive Order 100, which kicked off this regulatory reform effort, recognized the "vital importance of offshore wind energy to aid" in the transition to a clean energy economy. Current coastal zone management (CZM) regulations, including those provisions mentioned in the public stakeholder meeting in September 2020, assume that transmission flows in the state will continue from west to east—as they have for the past century. But with offshore wind, new transmission infrastructure must come ashore from the opposite direction, and offshore wind developers, under the current regulatory framework, face limited options in finding the best transmission route to interconnection points near the coast. In this context, regulatory approaches must continue to consider new technologies related to transmission infrastructure in the coastal zone to make it possible for the state to meet its goal of building 7,500 megawatts of offshore wind generation capacity by 2035.

Ørsted has participated in the NJDEP's NJ PACT stakeholder proceedings and it supports the addition of policies to the CZM regulations that would expressly encourage and permit the installation and operation of offshore wind transmission infrastructure in the coastal zone. Although our review has determined that offshore wind development in New Jersey could be accommodated within the current rules, establishing the appropriate criteria for evaluating mitigating impacts is needed.

For example, NJDEP could modify the CZM regulations to clarify that installation of submerged electric transmission cables is allowable in Special Areas, N.J.A.C. 7:7-9. Because current CZM regulations at N.J.A.C. 7:7 do not fully envision or express the range of cable installation techniques or technologies to be utilized by offshore wind, the NJ PACT effort provides a welcome opportunity to clarify and modernize appropriate regulation on submerged electric transmission cable installation. As suggested

in the NJDEP's stakeholder meeting, the NJDEP should consider providing flexibility in those land use and environmental regulations for certain energy infrastructure projects that help meet the goals of the Global Warming Response Act, Energy Master Plan, and Strategic Offshore Wind Energy Plan. NJDEP's coastal zone regulations should allow a balance between the environmental benefits gained by offshore wind as a clean renewable energy and potential impacts to coastal resources. As part of this evaluation, Ørsted would expect that the NJDEP's permit evaluation include alternatives analysis that support minimizing impacts while recognizing the construction and engineering limitations associated with offshore wind and use of mitigation measures to offset any impacts. Many of the existing NJDEP rules allow for the same evaluations and mitigation however, the recent developments in the offshore wind industry were not recognized when the existing rules were established.

Such an approach is particularly warranted in the context of offshore wind because minor and/or temporary impacts to coastal habitats from accompanying transmission infrastructure may be more than offset from the beneficial environmental effects of offshore wind. The coastal zone regulations should specifically allow NJDEP to take additional considerations into account, and to provide for a balanced, environmentally protective, approach. Moreover, prohibitions on new energy infrastructure in portions of the coastal zone would unfairly disadvantage relatively unobtrusive energy infrastructure when compared to the other exceptions expressly provided in the regulations. These exceptions include allowances (if certain criteria are met) for construction of new public fishing piers; private residential docks, piers, or moorings; and commercial marinas and new dredging for commercial marina expansions to name a few.

Regarding some specifics on the current rules, Ørsted agrees with the comment made during the stakeholder meeting that direct embedment of electric transmission cable by jet plow or water jetting does not constitute "new dredging" as defined at N.J.A.C. 7:7-12.7(a). Jet plowing or water jetting embedment methods utilize a hydraulically powered water jetting device to bury the cable. These methods are considered to be more effective and far less impactful when compared to traditional mechanical dredging, and are, in fact, the industry standard. The hydraulic pressure nozzles on the "jetting swords" generate a direct downward and backward force that temporarily fluidizes the sediment in a narrow trench along the cable route. The transmission cable then settles under its own weight into the fluidized sediment. The objective of this method is to maximize resettling of sediments within the trench and the method does not produce a material upward movement of sediment into the water column. These installation techniques also do not result in permanent changes to bathymetry, which was an original concern justifying limits on dredging. *See* Coastal Zone Management and Coastal Permit Program Rules, 47 N.J.R. 1392(a), July 6, 2015 ("[N]ew dredging also results in permanent physical changes in water depth, circulation, and sediment types.").

We encourage NJDEP to make mitigation consistent in terms of types of activities and resources; construction of marinas and piers specifically provide for mitigation for certain activities and habitat types because they are deemed water dependent. Offshore wind infrastructure also is water dependent and should be viewed in a similar way to strike a more equitable balance between offshore wind energy and regulated resources.[1] To the extent that NJDEP determines that compensatory mitigation is warranted for any permanent impacts associated with offshore wind infrastructure in the coastal zone, NJDEP may

[1] Contrary to one of the comments made at the stakeholder session, offshore wind turbines are water dependent. Due to their size, which are larger than onshore turbines, they cannot be transported or installed via truck or rail. They are specially designed for the offshore marine environment.

consider requiring a monetary contribution, as it does for impacts associated with the above-mentioned water-dependent projects. Given the unique linear nature of transmission infrastructure, however, NJDEP may consider adjusting how any monetary contributions are determined. For example, a hierarchical compensatory structure could be developed for mitigation of actual adverse impacts of offshore wind projects that takes into consideration factors like the size and location of the project, measures taken to mitigate impacts, comparative project alternatives and the overall public benefit of the project.

As part of the NJ PACT regulatory reform, we also request that NJDEP review the current regulations to be sure they are grounded in recent data and science. For example, the current regulations at N.J.A.C. 7:7-9.2(a)(2) do not prioritize 2012 surveyed shellfish areas over 1963 surveyed areas. Given changes in shellfish density and location over the past half century, this approach no longer makes sense. To build the clean energy economy of the next century, NJDEP should not give disproportionate weight to surveys and studies incorporated by reference in regulations when those surveys and studies may be more than 25 years old or superseded by more relevant recent data.

We propose the following clarification of the existing rules be added to the CZM regulations, perhaps as part of 7:7-9.2 or more generally to clarify that installation of transmission cables is not prohibited in Special Areas, such as shellfish habitat, or by Water Area, Habitat, Use or Resource Rules in the CZM regulations:

> *Linear development in Special Areas of transmission cables to connect offshore wind projects is acceptable under N.J.A.C. 7:7, provided that*
>
> *1) the transmission cable is installed using*
>
> *a) trenchless technologies such as horizontal directional drilling or similar,*
>
> *b) jet plow or jet trenching devices when in estuarine or marine environments, or*
>
> *c) a combination of a) and b);*
>
> *2) there is no practicable alternative alignment which would have less impact on the resource, and*
>
> *3) mitigation of impacts on the resource(s) may be provided in accordance with N.J.A.C. 7:7-17.*

Because the current definition of "submerged cable" as it relates to "new dredging" is defined at N.J.A.C. 7:7-12.21(a) as "underwater telecommunication cables, and shall include all associated structures in the water such as repeaters," NJ PACT provides an opportunity to include submarine electric transmission cables in the regulations. This would avoid future doubt that such use is regulated as a miscellaneous use under N.J.A.C. 7:7-12.24.

To account for unforeseen circumstances and ancillary work associated with trenchless construction activities, Ørsted also urges NJDEP to add clarifying language based on that which was included in the preamble to the 2014 proposed amendments to the Coastal Zone Rules: "Because directional drilling and jet plow or jet trenching equipment cannot pass through certain geological formations efficiently, in some cases limited new dredging or surface lay and burial with concrete mattress protection may be necessary within a section of the proposed pipeline or cable route. Where this occurs, new dredging may be necessary to complete the installation." *See* 46 N.J.R. 1051(a), June 2, 2014 (discussing

N.J.A.C. 7:7-12.7 New dredging). Further adjustments and changes may be appropriate to conform other rules, e.g. energy facilities or linear development, to these clarifying amendments.

Lastly, to the extent NJDEP is considering the idea raised at the stakeholder meeting of co-locating submerged pipelines, telecommunications cables and transmission cables along established routes, Ørsted urges caution. While on its face, the idea of identifying in advance certain preferred routes could provide welcome certainty at early stages of offshore wind project development, we expect several practical challenges may result from such an approach. First, as a general matter, electric transmission cables need to avoid other cables and pipelines as much as practical. If transmission cables are situated too closely together, cable temperatures increase, and the cable rating (ability to carry electricity) decreases. Any co-location corridor would have to provide for adequate spacing between cables and pipelines. From a construction and operations perspective, co-location also increases the chances that another cable or pipeline operator working in near proximity could inadvertently damage the cable. Second, co-location should be a long-term approach and not binding on projects like Ocean Wind that have already spent years surveying and developing a proposed cable route. Ørsted is happy to provide further comment at the appropriate time if this idea is further developed.

Thank you for your consideration of these comments.

Yours sincerely,

Marc Reimer

Marc Reimer

mreim@orsted.com
Tel 8572761725