

August 19, 2020

State of New Jersey
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, New Jersey 08625-0350

Re: Draft New Jersey Offshore Wind Second Solicitation Guidance Document

Submitted electronically to OSW.Stakeholder@bpu.nj.gov and Board.Secretary@bpu.nj.gov

Dear Commissioners,

Thank you for the opportunity to provide comments on the State of New Jersey's Draft Offshore Wind Solicitation Guidance Document (Draft Guidance Document). The Nature Conservancy in New Jersey strongly supports Governor Murphy's goal of 7,500MW of offshore wind power for the State of New Jersey and welcomes the opportunity to work with the Governor, the Board of Public Utilities (NJBP) and Department of Environmental Protection (NJDEP) to ensure that this goal is met in a manner that adequately and equitably balances environmental protection with the need for clean, renewable sources of energy.

The Nature Conservancy (TNC) is one of the leading conservation organizations in the world, with a presence in all 50 states and over 70 countries worldwide. Our mission is to conserve the land and waters on which all life depends by working in a collaborative, science-based manner with a variety of partners. In New Jersey, TNC has helped to protect over 60,000 acres of open space habitat for biodiversity, restored riverine and coastal habitats, and promoted at the state and local levels the use of nature-based solutions to the impacts of climate change. As New Jersey experiences the increasing impacts of climate change, we are working to help ensure equitable carbon neutrality by 2050; that New Jersey's iconic forests, rivers, and coasts are healthy, resilient and connected; that New Jersey has invested in the health of our coastal habitats to benefit millions of residents and visitors; and that our cities are climate-resilient, livable and healthier.

TNC strongly supports the emphasis placed on the protection of environmental and natural resources within the Draft Guidance Document, as reflected in the required elements of an Environmental Protection Plan (EPP) and Fisheries Protection Plan (FPP). We commend the improvements over the first solicitation guidelines, most notably the additional elements required in the EPP; the inclusion of the weighting of the evaluation criteria, which weights environmental protection at 20% of the total score; and the additional requirement for a separate, detailed FPP. As the state evolves this piece of the offshore wind contracting process, we support increasing the specificity of the information required in these plans. This would send a very clear signal to the industry and interested stakeholders that every project built in New Jersey carries high expectations by the State. *We offer the following additional recommendations for inclusion in the final Guidance Document.*

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Develop robust local and regional monitoring data

To reinforce the importance of robust local and regional monitoring data, *we urge the NJBPU to require developers contribute funds for the regional research needed to assess and avoid impacts to marine wildlife.* This research is critical for helping stakeholders and regulators evaluate project proposals, and for driving innovations within the industry to advance solutions that can avoid or minimize impacts. New York set a great example: developers building projects in that state will provide \$10,000 per MW for regional-scale wildlife and fisheries monitoring and research to help illuminate potential area specific and cumulative impacts to inform adaptive management as projects get built out over the next decade or more. Research and monitoring aimed at understanding and then avoiding, minimizing and mitigating negative impacts to marine fish and wildlife is essential for successful build-out of offshore wind energy at a scale that will meet New Jersey's renewable energy goals and the offshore wind energy procurement goals of our neighboring states. New York's Environmental Technical Working Group (ETWG), which includes project developers, conservation organizations, and federal and state agency representation, including NJDEP and NJBPU, supported the inclusion of these measures in the procurement process.¹ This is a major precedent, and we strongly recommend that New Jersey, with its major commitment to offshore wind, require the same provision.

Large-scale monitoring is essential to track both environmental and human features of the ecosystem that overlap multiple planning areas and leases. Developers are already coordinating with the entities that have been, or are being, developed to steer and fund research that will contribute to the regional-scale analyses of population-level change and cumulative impacts across the geographic range of the North Atlantic Right Whale and other affected species. TNC has been working closely with state and federal agencies, environmental organizations and offshore wind developers to establish the Regional Wildlife Science Entity² (RWSE), which would support research and monitoring of wildlife and offshore wind energy. The RWSE will fill a void that has been identified by state and federal agencies, developers, academic researchers, environmental protection advocates, and many other stakeholders.

Add Specificity for Mitigation Measures

We strongly support the provisions of the EPP as necessary for the Board to review bids, including requiring: a comprehensive assessment of potential impacts from the project; a plan to address those impacts, including any innovative measures to be deployed; a description of baseline and monitoring data to be collected and shared; and plans to engage stakeholders and address concerns throughout the lifetime of the project. The information provided by bidders in these critical areas will help the state determine whether developers have adequate plans factored into their bid price and timeline to address these issues critical to a project's success. Additional specificity regarding expectations by the state for each of these areas could greatly enhance the role of the EPP in helping New Jersey's awarded projects remain on track for responsible development.

TNC supports the extensive list of avoidance and minimization measures provided within the Draft Offshore Wind Strategic Plan released in July 2020. However, as we recommended in our August 17, 2020 comment letter, we believe that some mitigation measures should be required by the state (overseen by NJDEP) to ensure effective protection of our natural resources. For example, NYSERDA's recently announced solicitation for 2,500 MW includes several critical protections for wildlife, including

¹ April 2020 Memo to NY Public Service Commission re: Recommendations of the NY Environmental Technical Working Group: https://a6481a0e-2fbd-460f-b1df-f8ca1504074a.filesusr.com/ugd/4b9f26_54ce70c6cba54158a9ebc3ddcd248a4b.pdf?index=true

² <https://www.nyetwg.com/regional-wildlife-science-entity>

an important prohibition on nighttime pile-driving to protect marine mammals (which Maryland has also prohibited on its awarded projects). In addition, developers should be required to monitor and transparently disseminate information about efficacy of avoidance and mitigation measures in a timely fashion in order to adaptively manage the construction and operation of offshore wind farms.

The environmental non-governmental agencies on New York's ETWG recently recommended the following measures to be included in its recent solicitation request. TNC requests that NJBPU consider them for inclusion in its Guidance Document or give preferential scoring to those proposals that include the following:

- Restrictions on construction activities and geophysical surveys with noise levels that could harass or injure vulnerable marine mammals in locations and during periods with higher exposure exposure, as identified by the establishment of a Dynamic Management Area (DMA) or Seasonal Management Area (SMA), detection (via passive acoustic monitoring) of species of concern in the vicinity, or other means.
- Commitment that pile driving and geophysical surveys with significant noise levels (*i.e.*, RMS sound pressure levels > 180 dB re 1 uPa at 1 meter for equipment that operates between 7 and 35 kHz) will not commence when visual monitoring of exclusion zones is not feasible (*e.g.*, at night and during poor visibility conditions such as fog, heavy rain, poor sea state conditions).
- Monitoring the clearance zone for marine mammals for a minimum of 60 minutes prior to the initiation of pile driving activity and 30 minutes prior to the initiation of survey work with significant sound levels using a multi-method approach, such as Passive Acoustic Monitoring (PAM), Protected Species Observers (PSOs) approved by the National Marine Fisheries Service, and other proven technologies.
- Use of trained crew members as lookouts to reduce risk of collisions with marine mammals. On vessels operating at greater than 10 knots during high risk periods, designated crew lookouts should be used to help reduce risk of vessel-mammal collisions in instances where PSOs for visual monitoring are not employed due to technical or logistical feasibility or human safety concerns.
- Reduce artificial lighting during all phases of development to the extent possible while maintaining human safety and regulatory compliance.
- If avian monitoring indicates a need for perch-related deterrents, mitigation measures should be implemented and fully detailed in the EPP required by the solicitation guidelines.

In order to meaningfully inform the rapid progression of projects anticipated in New Jersey, the developers also should be required to report on and analyze construction monitoring data every six months for the first three years of a project. We recognize that this rapid reporting will be a significant burden for the developer, and state agencies should similarly invest time and other resources to assess the data and adapt future solicitation and development activities accordingly. Given the rapid development of offshore projects over the next several years, a process should be in place so that what is learned in the early stages of development is applied at the later stages.

Preferentially score the use of quiet foundations

Finally, we request the NJBPU give preferential scoring credit to projects that commit to adopting quiet foundations (*any technology that does not require pile driving*). Incentivizing this technology could help advance the offshore wind industry while avoiding a serious environmental impact. Pile driving noise

during the construction phase has been identified as a stressor of high concern for marine wildlife.³ The loud impulsive sound from pile driving that propagates through the water column and substrate impacts marine mammals, sea turtles, fish, and invertebrates, some of which support economically valuable fisheries. Potential impacts of unmitigated exposure to pile driving noise include physical injury, hearing impairment, disruption of vital behaviors such as feeding, breeding, and communication, habitat displacement, stress, and other health effects.⁴ Avoiding, minimizing, and mitigating exposure of marine wildlife to pile driving noise unequivocally represents the mitigation hierarchy of “best practice.”

The mitigation hierarchy should serve as the foundational framework used by NJBPU and NJDEP for considering how to make all stages of offshore wind energy development compatible with marine life and existing human uses; following the hierarchy, it is more advantageous to avoid an impact than to minimize or mitigate it. Fortunately, commercially available options exist for the construction of offshore wind turbines that do not require pile driving, and thus avoid the noise impacts stemming from this activity. These options, referred to here as “quiet foundations,” currently include various designs of suction bucket and gravity-based foundations. Sediment conditions along the Atlantic OCS appear to be generally conducive to the use of quiet foundations.⁵ Indeed, the 800+ Megawatt *Empire Wind* project demonstrates the viability of these technologies through the proposed use of gravity-based foundations. We strongly encourage further research on the potential for and expansion of quiet foundations for next generation wind turbines across as broad a set of sea floor conditions as possible.

Thank you again for the opportunity to comment on the Draft NJ’s Offshore Wind Second Solicitation Guidance Document. We appreciate the steps New Jersey is taking to establish a transparent, fair solicitation process.

Yours in conservation,

Patricia Doerr

Patricia Doerr
Director of Coastal and Marine
Programs

³“New York State Offshore Wind Master Plan Environmental Sensitivity Analysis. Final Report.” NYSERDA Report 17-25. Prepared for New York State Energy Research and Development Authority by Ecology and Environment Engineering, P.C., New York, New York, (November 2017). Available at: <https://www.nyserdera.ny.gov/-/media/Files/Publications/Research/Biomass-Solar-Wind/Master-Plan/17-25i-Environmental-Sensitivity.pdf>.

⁴ See, e.g., Weilgart, L. “The Impacts of Anthropogenic Ocean Noise on Cetaceans and Implications for Management,” *Canadian Journal of Zoology* 85, no. 11 (2007): 1091-1116; Weilgart, L. “The Impact of Ocean Noise Pollution on Fish and Invertebrates,” *OceanCare* and Dalhousie University (May 2018). Available at: https://www.oceancare.org/wpcontent/uploads/2017/10/OceanNoise_FishInvertebrates_May2018.pdf.

⁵ Williams, S.J., Arsenault, M.A., Poppe, L.J., Reid, J.A., Reid, J.M. and Jenkins, C.J., “Surficial sediment character of the New York-New Jersey offshore Continental Shelf region; a GIS Compilation.” U.S. Geological Survey Open-File Report 2006-1046 (2006). Available online at <http://pubs.usgs.gov/of/2006/1046>.