

Atlantic Shores Offshore Wind 1 Dock 72 Way, Floor 7 Brooklyn, NY 11205

June 12, 2024

Sherri L. Golden
Secretary of the Board
Board of Public Utilities
44 South Clinton Avenue
1st Floor, P.O. Box 350
Trenton, New Jersey 08625-0350

Re: Docket Number QO24020126

Dear Secretary,

Atlantic Shores Offshore Wind appreciates the opportunity to provide comments and feedback on the ongoing update of the New Jersey Energy Master Plan (EMP). As one of the leading offshore wind developers in the region, we are committed to supporting New Jersey's ambitious clean energy goals and believe that the updated EMP should reflect a robust and forward-looking approach to energy generation and sustainability.

The Necessity of Diverse Energy Sources

A diverse energy portfolio is crucial for ensuring the reliability, resilience, and sustainability of New Jersey's energy system. While the state has made significant strides in promoting renewable energy, it is essential to continue expanding and diversifying these efforts. Offshore wind, in particular, should play a central role in this diversified energy mix due to its numerous advantages and potential to contribute substantially to the state's clean energy goals.

Offshore wind offers a consistent and abundant source of energy that complements other carbon-free sources like solar and nuclear. Unlike solar power, which is subject to daily and seasonal fluctuations, offshore wind can generate electricity more consistently due to higher and more stable wind speeds over the ocean. Additionally, the amount of power that can be produced by offshore wind far exceeds that of other types of renewable energy. This reliability and energy generation potential is critical as New Jersey seeks to phase out fossil fuels and increase its reliance on renewable energy.

Offshore Wind and Energy Storage: A Reliable Partnership

One of the key concerns with renewable energy sources is their variability. However, this challenge can be effectively addressed by pairing offshore wind with grid-scale energy storage solutions. Energy storage systems, such as batteries and pumped hydro storage, can store excess electricity generated during periods of high wind and release it when demand is high or when wind speeds are lower. This integration ensures a steady and reliable supply of electricity, enhancing grid stability and reducing the need for backup power from fossil fuel plants. Additionally, smaller and distributed energy storage systems can also enhance the benefits of offshore wind by improving the reliability and resilience of the local distribution system.

Offshore wind farms, strategically located off New Jersey's coastline, have the potential to generate significant amounts of clean electricity. When combined with energy storage, offshore wind can provide a dependable and controllable power source that supports the state's transition to a cleaner energy system. This partnership is essential for meeting peak demand periods and ensuring a continuous power supply, thereby addressing one of the primary challenges associated with renewable energy integration.

Supporting New Jersey's Electrification Goals

As New Jersey advances towards electrifying various sectors, including transportation and residential heating, the demand for electricity is expected to increase substantially. According to PJM, we expect annual load growth of at least 2% which will only be exacerbated by the influx of data centers due to the ongoing Al-boom. Electrification is a critical strategy for reducing greenhouse gas emissions, as it replaces fossil fuel-based systems with cleaner, electric alternatives. However, the environmental benefits of electrification can only be fully realized if the electricity used is generated from clean and renewable sources like offshore wind. As such, the transportation sector is one of the largest contributors to greenhouse gas emissions in New Jersey. Transitioning to electric vehicles (EVs) presents a significant opportunity to reduce these emissions. However, the environmental impact of EVs is directly linked to the source of the electricity used to charge them. If the electricity comes from fossil fuels, the emissions reduction potential of EVs is compromised. Therefore, expanding offshore wind capacity is crucial to ensuring that the electrification of transportation leads to meaningful reductions in greenhouse gas emissions.

Offshore wind can supply the necessary clean electricity to power the growing number of EVs in New Jersey. By doing so, it supports the state's goals of reducing emissions from the transportation sector, improving air quality, and enhancing public health. Moreover, the development of offshore wind infrastructure can also stimulate economic growth and create jobs in the state, further underscoring its importance.

Residential and Commercial Electrification

Similarly, the electrification of residential and commercial buildings is vital for achieving New Jersey's climate goals. Replacing natural gas and oil-based heating systems with electric heat pumps can significantly reduce emissions from the building sector. However, like with transportation, the effectiveness of this strategy depends on the cleanliness of the electricity supply.

Offshore wind provides a clean and sustainable source of electricity that can meet the increased demand from electrified heating systems. This transition not only helps reduce greenhouse gas emissions but also decreases reliance on imported fossil fuels, enhancing energy security and economic resilience.

Environmental and Economic Benefits of Offshore Wind

In addition to its role in reducing emissions and supporting electrification, offshore wind offers several other environmental and economic benefits. Offshore wind farms have a smaller land footprint compared to onshore wind and solar farms, making them an efficient use of space. They can coexist with other ocean activities such as fishing and shipping, minimizing disruption to existing industries.

Economically, the development of offshore wind farms in New Jersey can drive significant investment and job creation. The construction, operation, and maintenance of offshore wind farms require a skilled workforce, creating new employment opportunities in manufacturing, engineering, and other related fields. This economic activity can provide a substantial boost to local economies, particularly in coastal communities. Additional investments in local infrastructure, education, and social services is also an important element of offshore wind. For low and moderate-income communities, this can translate into improved public amenities, better access to education and training, and enhanced social services.

Recommendations for the Updated Energy Master Plan

Given the numerous advantages of offshore wind and its critical role in achieving New Jersey's clean energy goals, we recommend the following for the updated EMP:

Prioritize Offshore Wind Development

The EMP should prioritize the development and expansion of offshore wind capacity. Setting ambitious but achievable targets for offshore wind installation will provide a clear signal to investors and developers, encouraging further investment in this sector. Atlantic Shores recommends codifying the 11 GW goal as outlined in Governor Murphy's Executive Order 307.

Support Energy Storage Integration

To maximize the reliability and effectiveness of offshore wind, the EMP should promote the integration of energy storage solutions. Incentives and policies that support the deployment of storage technologies will help stabilize the grid and ensure a consistent power supply, particularly as offshore wind comes online over the next 5-10 years.

Facilitate Electrification with Clean Energy

As the state advances its electrification goals, the EMP should ensure that the increased electricity demand is met with clean energy sources. Offshore wind can play a key role in providing the necessary clean electricity, reducing emissions, and enhancing the overall sustainability of electrification efforts.

Streamline Permitting and Regulatory Processes

To accelerate offshore wind development, the EMP should address potential regulatory and permitting barriers. Streamlining these processes can reduce project timelines and costs.

Promote Research and Innovation

Investing in research and innovation for offshore wind and related technologies can enhance efficiency, reduce costs, and improve environmental outcomes. The EMP should support initiatives that foster technological advancements and industry growth.

Ensure Community Engagement and Environmental Justice

The transition to clean energy must be inclusive and equitable. The EMP should include provisions for engaging with communities, particularly those disproportionately affected by environmental and economic challenges, ensuring that the benefits of offshore wind development are widely shared.

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Conclusion

Atlantic Shores Offshore Wind is committed to supporting New Jersey's clean energy transition and believes that offshore wind is a cornerstone of this effort. By prioritizing offshore wind development, integrating energy storage, and ensuring that electrification efforts are powered by clean energy, the updated EMP can set New Jersey on a path to a sustainable, resilient, and prosperous future. We look forward to working with the Board of Public Utilities and other stakeholders to achieve these shared goals.

Warmly,

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