

Hon. Sherri L. Golden, Secretary NJ Board of Public Utilities 44 South Clinton Avenue, 9<sup>th</sup> Floor PO Box 350 Trenton, NJ 08625-0350

## RE: THE MATTER OF NEW JERSEY'S FOURTH SOLICITATION FOR OFFSHORE WIND RENEWABLE ENERGY CERTIFICATES (ORECs) Docket No. QO24020109

Dear Madam Secretary:

November 5 , 2024

Please place this letter in the Docket above.

Our organization, Save Long Beach Island Inc. is a non-profit, non-partisan, charitable group of over 10,000 supporters not opposed to offshore wind energy in general, but strenuously opposed to the Atlantic Shores South Offshore Wind projects, which we believe are ill-sited for the large wind turbines of today.

Our previous letter of October 30,2024 on the subject outlined our concerns with the Atlantic Shores South projects which are being considered in this solicitation.

This letter augments our prior letter by providing additional quantification and estimated costs to the concerns we expressed. We believe that by law the BPU needs to include an analysis of such costs in its required cost-benefit study in order to make a properly informed judgment. Such very significant costs were arbitrarily NOT included in the prior offshore wind solicitation evaluations.

#### Summary

If the anticipated subsidies for the two Atlantic Shores South projects are approved, the projects would cost New Jerseyans an estimated **\$110 billion** over their lifespan, almost twice the amount of the entire State budget for 2025 of \$55.9 billion. This staggering amount includes **\$73 billion** in "generic" costs that are also associated with other offshore wind projects, plus an additional **\$37 billion** in costs associated with the unique Atlantic Shores siting of huge wind turbines extremely close to the coast. The generic and site-specific cost breakdowns are shown below. All these cost factors should be considered and disclosed in the required cost-benefit analysis for the Atlantic Shores projects.

#### **Generic Costs of Atlantic Shores South Projects**

**1.** Substantially higher electricity rates across the State's residential, commercial, and industrial sectors. We believe that the BPU is considering highly subsidized rates for the Atlantic Shores South projects, which would increase average bills by around 12% (11% residential, 13% commercial, and 15%

industrial). Based on 2024 numbers, the above market cost over the lifetime of the projects would be **\$20 billion**<sup>1</sup>. In prior awards, the NJ BPU has underestimated electric bill increases by about 40%<sup>2</sup>.

**2. State investment in the Paulsboro, Salem County, and Sea Girt/Larrabee facilities.** In addition to direct subsidies of individual offshore wind projects, the State is investing substantial NJ taxpayer and ratepayer money to provide infrastructure support for the Atlantic Shores South project and other offshore wind projects. To date it has committed at least \$250 million for the Paulsboro marine terminal<sup>3</sup>, \$637.6 million (with another \$462 million planned) for the Salem county windport,<sup>4</sup> and another \$1.2 billion for the Sea Girt/Larrabee transmission system/upgrade (with an additional \$7.1 billion expected to follow)<sup>2</sup>. Combined these total **\$9.7 billion**. And this does not take include a new, even more costly offshore transmission system, now on the drawing boards, that would send power from NJ offshore locations to northern NJ and New York. All of these additional State costs should be proportionally allocated to each project that will use them when evaluating costs verses benefits. Approximately **\$3 billion** should be allocated to the Atlantic Shores South projects.

**3.** Loss in business revenue and jobs due to rate increases. A 2011 study<sup>5</sup> found that a 2 percent increase in electric rates results in an annual loss of 2,219 jobs, with an average decrease in wages of \$111 per year, which translates into a Statewide loss of \$330 million in annual disposable income. A 12 percent rate increase from the Atlantic Shores South projects would result in a present (2024) value loss of \$40 billion<sup>1</sup>. Such costs are major and should be included in the cost-benefit analysis.

**4. State cost of removal and onshore processing of wind turbines at the end of their useful life.** These costs are likely to fall to the State because there is no definitive federal or state requirement for the company to remove the turbines. Neither Atlantic Shores nor government agencies have disclosed a feasibility study or cost analysis for the removal and onshore processing of turbines — a massive undertaking that could be comparable to the cost of installation, on the order of **\$10 billion**. The BPU cost-benefit analysis should clearly state whether turbine removal and processing is included in the project decommissioning plan, what cost was allocated toward that, and what provision was made to provide for financial assurance for funding that cost.

**5. Energy back-up costs and the "wake effect."** The introduction of intermittent wind-powered energy to the regional electric supply system requires more back-up sources, potentially within New Jersey. In addition, the BPU has not considered the "wake effect", how wind is diminished in a row of turbines that is downwind from another row, which reduces the power output from the Atlantic Shores and other offshore wind projects due to the close spacing between turbines. A recent study<sup>9</sup> of a wind complex close to the Atlantic Shore South area indicates that the internal wake effect within the complex itself is significant in terms of reductions in wind speed. The nature and cost of the necessary energy back-up should be included to attain an accurate cost-benefit analysis.

## Additional Costs Associated with the Atlantic Shores Siting Wind Turbines Close to Shore

**6.** Loss in tourism. A 2024 study<sup>6</sup> estimated that the Atlantic Shores projects would cause a \$668 million loss in annual tourism revenue and the loss of 6,700 tourism-related jobs per year in Ocean County. The present (2024) value of that lost tourism revenue would add up to \$12 billion over the first 20 years of turbine operations. Another 2024 study<sup>7</sup> estimates an additional annual \$1.6 billion loss in tourism revenue in neighboring Atlantic County, with related job losses of 10,700 per year and a total cost to Atlantic County of \$21 billion over the lifetime of the project. The total expected loss in tourism related

revenue over the life of the Atlantic Shores projects for both areas is **\$33 billion**. Such costs were previously not included in prior BPU cost-benefit analysis, but are significant and should be.

**7. Decline in property values.** Government agencies and wind developers like to cite a Block Island (Rhode Island) study to conclude that offshore wind development will have no impact on property values. But this is highly misleading because Block Island only has only *five small wind turbines* located off rocky coasts and cliffs, much farther and less visible from popular beaches. Five turbines is a long way from 200, each three times the height of the Statue of Liberty and less than 9 miles from shore at their closest point.

A study commissioned by the NJ BPU<sup>8</sup>, that examined how the visibility of offshore wind turbines would impact property values, found that oceanfront and ocean-view properties would lose significant value. It posits that an oceanfront or ocean-view property would drop toward the value of the row behind it with turbines visible. Applying that principle to the 1,100 oceanfront properties on LBI predicts a reduction in property value of 38 percent for each home, for a total loss in property value of \$1.6 billion; homes one house away from the beach would each experience a 25 percent reduction in value for an additional loss of \$0.6 billion. A similar analysis conducted for Brigantine Beach<sup>7</sup> shows losses of up to \$0.8 billion per home for the first two rows of houses nearest the ocean. This results in a **total loss of \$3 billion** just for the first two rows closest to the ocean in these towns, and would likely have a cascading effect on other property values. Anticipated losses in property values and tax revenue for all affected structures were missing from prior BPU cost benefit analyses, but are significant and should be included in the cost-benefit analysis of the Atlantic Shores South projects.

**8.** State costs for beach cleanups of debris from wind-turbine component failures. These costs are uncertain because offshore wind companies and government agencies have not released an analysis of the frequency and consequences of turbine component failures. But, as we know from the Vineyard Wind turbine failure off the coast of Nantucket in July, the cost of removing fiberglass and other debris from beaches is substantial, as is the cost of cleaning up beaches in the aftermath of vessel wrecks, which have run into tens to hundreds of millions of dollars. Depending on failure frequency, the cost of such cleanups over the project's lifetime could approach **\$1 billion**, or even more if failures occur during tourist season. Costs covering the eventuality of turbine failures have not been factored into prior BPU cost benefit analyses but should be accounted for in the cost-benefit analysis of the pending Atlantic Shores South project.

In summary, the total lifetime project cost is estimated at \$110 billion with \$37 billion of that attributable to the close to shore siting. Save Long Beach Island Inc. is providing this cost information to the BPU to assist it in its cost-benefit evaluation. We will be following the 4<sup>th</sup> Solicitation evaluations closely to see how these issues are treated and to verify that an accurate and complete cost benefit analysis is done for the project as required by law.

We await the Board's award decision and cost-benefit analysis to see: (1) the full costs of the Atlantic Shores South project, (2) what benefit could outweigh this large cost in order to satisfy the State's "net benefit" test, and (3) how the extra \$37 billion close-to-shore component can be justified compared to other projects. Of particular concern is that the unique costs of the close in Atlantic Shores projects be properly included and evaluated.

We hope this data is useful and thank you for considering our concerns.

Signatory,

# Bob Stern

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cc: Division of Rate Counsel

Thomas Stavola, Esq.

### References

1. Economic Analysis of the Atlantic Shores South Offshore Wind Projects, Edward, P. O'Donnell, White Strand Consulting LLC, August 2024

2. Economic Analysis of the Attentive and Leading Light Offshore Wind Projects, Edward P. O'Donnell, White Strand Consulting LLC, August 2024, Table 6-1

3. NJ Governor's Office press release, 12/21/2020, www,nj.gov/governor/news

4. NJ Economic Development Authority NJ Wind Port Prospectus, njwindport.njerda.gov

5. The Cost and Economic Impact of New Jersey's Offshore Wind Initiative, Beacon Hill Institute at Suffolk University, June 2011

6. Potential Economic Losses of Reduced Tourism Attributable to Proposed Wind Turbines in Long Beach Island, NJ, Tourism Economics, March 2024

7. Report to Atlantic County Commissioners on Offshore Wind Developments, the Industrialization of Our Ocean and Impact to Our Local Economy, April, 2024, Defend Brigantine Beach

8. An Assessment of the Potential Costs and Benefits of Offshore Wind Turbines, Global Insight, 2008.

9. Estimating Long-Range External Wake Losses in Energy Yield and Operational Performance Assessments Using the WRF Wind Farm Parameterization, Arc Vera Renewables, 2022.