BEFORE THE NEW JERSEY BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF OCEAN WIND LLC PURSUANT TO N.J.S.A. 48:3-87.1(F) FOR A DETERMINATION THAT CERTAIN EASEMENTS AND CONSENTS NEEDED FOR CERTAIN ENVIRONMENTAL PERMITS IN, AND WITH RESPECT TO, THE COUNTY OF CAPE MAY ARE REASONABLY NECESSARY FOR THE CONSTRUCTION OR OPERATION OF THE OCEAN WIND 1 QUALIFIED OFFSHORE WIND PROJECT Docket No.

Direct Testimony

of Robert Church

on behalf of the County of Cape May

Re: Onshore Cable Routes Considerations

Dated: August 29, 2022

Q. 1 Please state your name and business address. 2 Robert Church, County of Cape May Engineering Department, 4 Moore Road, CMCH, NJ 3 08210 4 5 Q. By whom are you employed and in what capacity? 6 Employer- County of Cape May, serving in the capacity as County Engineer and the Director 7 of the Engineering Department. 8 9 Q. Please describe your professional experience and educational background. 10 11 BS Civil Engineering, Pennsylvania State University- 1985, Licensed Professional Engineer, 12 NJ Licensed Professional Planner, NJ Licensed Building Inspector RCS. 13 14 Over 37 years of engineering experience designing, managing, and coordinating the 15 construction of over \$100 million dollars of private and public construction projects 16 including major public infrastructure projects. Representative projects include structural 17 design, pump station and force main design, sanitary sewer design, drainage infrastructure 18 design, major site plan and commercial development design, roadway design, and bridge 19 replacement and rehabilitation design. 20 Currently responsible for administering millions of dollars of annual grant allotments 21 from the State of New Jersey, FHWA and County to be used for the design and 22 construction of public infrastructure projects. Responsibilities include grant acquisition, 23 coordination, project scoping, concept developments, consultant evaluation, preparation 24 of RFPs, design coordination, permit coordination, quality control review, preparation of 25 bid documents, project advertising and award, construction management and oversight 26 and budget control 27 28 Q. Have you previously testified before the New Jersey Board of Public Utilities or other 29 Administrative Agency? 30 31 A. No. 32 33 Q. Have you had a chance to review the Direct Testimony of Pilar Patterson submitted in 34 support of the within Petition? Yes 35 36 What comments, if any, do you have with regard to that testimony" A. 37 38 My review of the project and alternative routes was based solely on the testimony 39

My review of the project and alternative routes was based solely on the testimony presented by Mr. Patterson's testimony and did not reflect the review and evaluation of a more detailed Environmental Impact study or thorough Alterative Analysis (if it exists) that Mr. Patterson's testimony may have been summarizing. The testimony did not appear to include the "no build" alternative which should be investigated and evaluated in an objective manner in order to demonstrate the merit of the project and the project need. It would also appear that any determination of any route for transmission lines should await an environmental review by the New Jersey Department of Environmental Protection and federal agencies since that review might result in changes to the route being required.

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Limited Route alternatives

The exhibit listed in appendix C shows a total of 5 routes that were considered as alternatives in addition to the PPAR that is proposed. However, the testimony does not detail what, if any, obstacles exists with the Garden State Parkway option, which would seem to be the least intrusive route for residents, commercial uses, utility conflicts and potential infrastructure expansion in the future by the county.

The Sea isle alternative cites several issues with the proposed route, including traversing the intercoastal waterway, route proximity to the JFK park, route proximity to prime fishing grounds, historic buildings etc. However, this route would be within the improved right of way of Sea Isle Boulevard and would conceivably have almost identical impact as placing the transmission line within the improved right of way of Roosevelt Boulevard (CR 623). However, in the description of the PPAR for CR 623, there was no reference made to the detrimental impact of such issues. Furthermore, placing the line along Sea Isle Boulevard would actually have a slightly less impact since there currently exist a graveled shoulder 12' wide between the northerly edge of paving and guiderail. The CR 623 PPAR route would likely be placed within the adjacent grassed shoulder that interfaces with coastal wetlands. In addition, the PPAR overview does not discus the route proximity to the historic Tuckahoe Inn, the historic dwellings in Beasleys point, and the historic significance of the area to the Stillwell campaign that took place during the revolutionary war. The County and State of New Jersey have plans to construct a future planned passive park that will pay tribute to this significant event as part of a future open space project.

The Sea Isle Boulevard option, and the abandoned railroad options meticulously detail the issues with stream crossings, historic structures along Route 9 and the Magnolia Lake watershed as issues of concern with these routes and form the basis for rejection. However, both of those routes could easily avoid those conflict points by using the Garden State Parkway as the northerly project route once off from the barrier island, rather than the Route 9 and Corson Tavern Road routes.

There is little discussion of the rating system that was used in evaluating the PPAR. The testimony seems to place all feasibility on the environmental impacts, without evaluating the social-economic impacts, traffic impacts, future roadway expansion detriment and utility conflict impacts that are inherent in the PPAR. An objective matrix of project route benefits and detriments should be presented so that all routes can be evaluated objectively.

As proposed, it appears that the proposed alternate route analysis could, and should, include hybrid versions of the initial route selections that combine the benefits of several routes. For example, the abandoned railroad route should combine with Garden State Parkway route and that route should run within the GSP right of way

up to the point of the BL England touch down and look to utilize the former Route 9/ GSP interconnect as a westerly route alternative.

More sensible routes

From the county's infrastructure perspective, resident impact, and maintenance and accessibility impact of the proposed transmission main, the preferred route should either be the Great Egg Harbor option (completely out of county right of way) or the abandoned railroad alternative with a northerly leg extension using the Garden State Parkway. Both of these route will eliminate conflict on county roads and infrastructure, traffic on county roads and minimize resident and commercial business impacts both during construction and for long term maintenance accessibility, and would minimize the issues for obtaining county consent.

Although the rail road option was discounted in the report, it seems that this route would not have significant environmental impacts if the means and methods of line installation were modified from a cut and cover to a series of directional drillings, minimizing the environmental footprint. The project could then possibly include the improvement of the the rail bed to create a nature pathway providing public access, with is typically a desired outcome for environmental permitting.

Regulatory input

It is unclear if the various alternatives were formally presented to the regulators and if feedback of their concerns is the basis for route selection. If a particular route does have a fatal flaw eliminating the route as a possibility, it should be presented as such. The current testimony summary did not provide this insight and merely recommends a PPAR route without definitive ranking system. It appears that an overriding factor in the selection could be cost and acceleration of route selection schedule. An alternative analysis does not appear to weigh the county's route concerns into the selection process as compared to the concerns of the other routes and their regulatory obstacles. The "no build" alternative does not appear to have been discussed in the summary.

The directional drill that is proposed for the PPAR may require a USCG permit, which could trigger section 106 compliance. This is relevant since due to the objection of the county on the project route, section 106 compliance would not be positive.

Lack of details

The objection to the PPAR not only reflects the county's position that the alternate routes analysis requires additional input and hybrid routes, but the objection reflect a the lack of detail relative to the impacts of the transmission line within the county right of way. There is no reference to the depth of the line, its width, proximity setbacks, or its actual location relative to the paved roadway scetion. It should be noted that the depth of the line may require dewatering, temporary sheeting or trench

boxes during installation, and other staging that could encroach onto adjacent wetlands which are not discussed in the testimony. Nor are the issues resulting from traffic staging, traffic detours and business disruption will be an adverse impact resulting from the construction activities. Roosevelt Boulevard is one of the busiest corridors in the county and only one of two commercial route servicing Ocean City.

The economic impact of the construction, and subsequent maintenance of the line is not discussed. If the desire is to install the main within the travel lanes thru the open cut method, it should be noted that the mainline of Roosevelt Boulevard consists of a concrete subbase which will likely require removal and reconstruction of the lane or lanes in which the main is located. This will create significant traffic and business impacts. Situating the main within the bituminous shoulder could conflict with existing and future utilities requiring that the main be constructed off of the paving edge and adjacent to coastal wetlands. The summary routes plan does not specifically denote the means and methods of construction or the exact location of the main relative to the paving edge, all critical factors with varying degrees of impact.

Specific to the PPAR, this route includes multiple utility crossings that will occur including the Cape May County Municipal Utilities Authority force main, Ocean City gravity sewers, South Jersey gas transmission mains and New Jersey American Water Company water mains that will all be within conflict with the proposed route. This will likely require rerouting or offsetting those facilities resulting in even greater environmental and logistical impacts. It does not appear that these realities have been given adequate consideration and would be additional negative impacts associated with the PPAR.

Specific to the PPAR at the Roosevelt Boulevard bridge, the northerly and southerly route locations are not dimensioned or accurately located. The northerly location, as graphically shown will be problematic to the county as it will limit the future replacement area that will be required to construct an offline bridge replacement in the future, including a required fender system. This is not speculative. The Roosevelt Boulevard Bridge was constructed in 1962. In 2015, the County invested \$7,859,304 to re-deck the bridge. A significant portion of the funding for this work came from the New Jersey Department of Transportation. The County has continuing obligations to NJDOT related to the bridge and NJDOT continues to have an interest in the use and maintenance of the bridge. These considerations appear to have been ignored or not been identified by Orsted and is may be necessary to include NJDOT in this process.

The proposed route, if it is to follow the general path of the Roosevelt Boulevard Bridge, should be moved further to the north and outside of a future bridge footprint and fender system. The southerly alignment appears to traverse the Ocean City row club facilities and the "S" alignment would likely need to be installed with the cut and cover method. It may be a challenge to feasibly locate a drill receiving a pit within the current south westerly depiction due to existing structures. Both the north

and south alignments will require permanent access easements for the main. It does not appear that the needs for those easements have been addressed.

Although the basis for the petition is to go around the County in securing consent to use county right of way, the PPAR still will occupy a crossing beneath the Garen State Parkway and along Route 9 if that eventually stands as the route. The Garden State Parkway is administered by the New Jersey Turnpike Authority and Route 9 is administered by the New Jersey Department of Transportation. It is unclear whether or not permissions from those entities is obtainable or has been obtained. If those entities are not inclined to consent to the PPAR, approval of the Petition would be meaningless.

It is our understanding that the New Jersey Turnpike Authority, in conjunction with the County and/or NJDOT will be upgrading and expanding the Garden State Parkway Exit 25 northbound ramp and traffic signal. There is also a plan between County and NJDOT to construct a passive park through a future MOU on property located in the vicinity of the BL England property. It appears that this future activity could impact the location of the transmission line thru this area. Yet, it does not appear that Orsted has considered this fact or its impact on the feasibility of the PPAR. Ideally, the line should bypass this area completely.

Other Considerations

There are unaddressed issues with regard to the potential installation of the transmission line over County Property or within the County right of way, including:

The proposed installation limits the County's ability to install additional drainage or other underground utilities due to proximity regulations. This may have a long term negative impact on coastal and roadway resiliency if appropriate drainage cannot be installed or other utilities cannot be installed or upgraded due to space limitations mandated by proximity regulations.

The latent electricity that will be imparted in the surrounding soil could potentially have a corrosive impact on other existing utilities such as gas mains, force mains or water mains that have ferrous pipelines. There appears to be no analysis of these potential problems and no vetting by Orsted or review by the existing utility companies to determine the extent of these impacts. These existing utility facilities already contend with the challenge of a saltwater environment and corrosive soils along the PPAR and additional soil electrical charges could worsen the impact an reduce the longevity of existing utilities along the route. Again, there appears to be no mention or evaluation of theses impacts for the PPAR.

The useful life of the conduit/ transmission line is not provided. Consequently, the County and other users of the ROW have no idea of the maintenance needs of the line and replacement/ upgrades schedules that might impact other utilities or the travelling public.

The county should be provided with an assurance that normal road equipment use, such as vibratory rollers that will be used during resurfacing activities, will not adversely impact the transmission line and that no additional precautions/ restriction will be imposed. Access to other existing utilities is needed and excavation at utility crossings at, or near, the transmission main will occur in the future due to required repairs or system upgrades by those utilities. The proposal is silent on the complications of these activities relative to the electrified main.

At some point in the relatively near future, the Roosevelt Boulevard causeway, and likely other roads along the PPAR, will be elevated in compliance with the Governor's initiative on sea level rise. The proposal does not address whether a surcharge placed on the existing roadway for the purpose of consolidating the underlying soils will harm the line if it is in place prior to the surcharge. This is an important consideration in terms of whether the PPAR is viable for the long term roadway planning and it does not appear to have been evaluated. There is no doubt that the vertical and horizontal expansion of the roadways along the PPAR will be happening in the future. There is no analysis of whether this future activity makes the PPAR less feasible and one of the other alternatives a better option.

18 Q. Does this complete your Direct Testimony?

19 A. Yes