

May 19, 2022

Submitted via email to NJBPU Secretary (board.secretary@bpu.nj.gov)

Board of Public Utilities 44 South Clinton Avenue, 1st Floor Post Office Box 350 Trenton, NJ 08625- 0350

RE: In the Matter of Declaring Transmission to Support Offshore Wind a Public Policy of the State of New Jersey (Docket No. QO20100630)

OW Ocean Winds East, LLC (OW East) commends the State of New Jersey on its engagement with stakeholders regarding the technical requirements and potential impacts of offshore wind transmission utilizing the State Agreement Approach (SAA) (Docket No. ER22-902-00). We appreciate the opportunity to share our perspective on key issues that may impact our ability to deliver cost-efficient and reliable energy to New Jersey.

OW East strongly supports New Jersey's SAA approach to transmission, as we believe it will provide clarity and optimization to ratepayers and OSW developers as NJ continues to develop its offshore wind program. We offer the following comments in response to the NJBPU Request for Comments on the above captioned matter.

About OW Ocean Winds East. LLC

OW East is a partnership between OW North America LLC (OW NA), a subsidiary of OW Offshore S.L. (Ocean Winds), and Seaway Energy (an affiliate of Global Infrastructure Partners), established to develop offshore wind projects in the United States. OW NA is the North American business unit of Ocean Winds (OW), a global joint venture between EDP Renewables ("EDPR") and ENGIE, two major clean energy companies. Global Infrastructure Partners is an \$80bn infrastructure asset manager and a top 10 renewables player with approximately 15GW in operation globally. OW East recently acquired lease OCS-A 0537, consisting of 71,522 acres in the New York Bight.



Questions for Offshore Wind Developers:

1. What are the most significant risks to completing your OSW generation project(s) on time and within budget if your project relies on one or more SAA transmission projects? How can those risks be best mitigated?

OW East response: The risks will depend on which SAA option (1a, 1b, 2, or 3) is selected for the generation project. OSW projects constantly own and manage overall schedule and budget risk to deliver generation to the POI. If OW East utilizes the SAA transmission projects, the OSW developer will not be able to comprehensively manage these risks for the transmission scope of the project. While this will represent a new paradigm, OW East believes that risks associated with all SAA options are manageable if OSW developers work collaboratively with transmission developers throughout the development cycle of the combined projects. Moreover, we would suggest that the BPU consider implementing mechanisms to incent transmission developers to maintain schedule and availability commitments during the planning and execution period.

Each option is discussed in more detail below:

- Option 1a the OSW project is responsible for developing the entire transmission export system from lease area to the POI, much like the current gen-lead process. Our presumption is that transmission developers have done significant diligence on all potential POIs, and thus any awarded 1a projects would encompass upgrades at optimal onshore POIs. Key risks to the OSW projects include finding suitable landing and onshore station locations to access these POIs, as highest-potential real estate may have already been secured by transmission developers due to the SAA process.
- Option 1b Similar to Option 1a, the onshore cable landfall and routing is still a risk for on-budget and on-time delivery of projects. However, the risk profile is reduced compared to Option 1a as the land acquisition risk would be lower given that any proposed 1b projects are presumed to have suitable site control and permitting diligence to accommodate the needs of OSW generation projects utilizing the 1b facilities.
- Option 2 The availability of a purpose-built offshore collector stations removes the risks in Option 1a and 1b and reduces all offshore routing risks for the OSW developer. However, this option introduces new risks such as project-on-project risk, added federal permitting complexity for offshore cable routes proposed (i.e no clear BOEM ROW/RUE process for a transmission developer's offshore cable), misaligned financial interests among OSW developer and transmission developer, and technology compatibility risk in terms of the selection of the offshore transmission equipment vs. the conditions of the lease area. For example, 320 kV or 400 kV HVDC technology might result in "stranded capacity" of wind generation in certain lease areas by leaving only incremental amounts of remaining generation. This could be the case if a lease area is capable of generating 1500 MW, but the transmission developed can support only 1200 MW. The remaining 300 MW may become uneconomical to develop. Given this, we believe that the BPU



should align potential transmission solutions with the optimal outputs of OSW lease areas if this option is chosen.

Option 3 – This option has similar risks to Option 2 and adds different risks such as the need to
phase the construction works of multiple OSW developers potentially using the same common
offshore collector(s) of the meshed grid. The coordination among developers, if multiple entities
will use the same offshore collector station, will introduce some uncertainty and lack of control
in each developer's timelines and budgets.

The separation of transmission development from the overall OSW project development presents some obvious risks, however enabling independent transmission developers to own this aspect of the overall development work is likely optimal. While OSW developers are able to competently develop transmission for their own projects, i.e., generator lead lines, this transmission would not necessarily be designed with the broader goals of the SAA in mind.

Beyond this, OW East believes that the queue process in PJM was not designed to accommodate OSW generation, and relying on the status quo will only lead to an increasing amount of problems as OSW continues to grow across PJM.

However, under the SAA approach, OSW developers will seek assurances that OSW projects will not be harmed by offshore transmission grid project delays or curtailment due to routine or unexpected maintenance outages. Contract rights for power deliverability need to be in place through an agreement. Provisions in the agreements that facilitate the construction and utilization of these assets need to include provisions covering maintenance, both scheduled and unscheduled (emergency). Operating agreements for these assets also need to include provisions including liquidated damages or other incentives paid to the OSW developer if the offshore transmission is not completed in time, as is the case in the Netherlands¹ and France. Finally, the agreements should also include provisions that ensure that OSW generation developers would not attempt to "over-connect" projects to the offshore grid; i.e., seek to connect more energy than provisioned for in any state solicitation award in order to build out a full lease area, as such connections could cause curtailment on other assets interconnected to the offshore grid.

2. For new Bureau of Ocean Energy Management ("BOEM") leaseholders, are there concerns about obtaining a PJM queue position given that a Board decision on the SAA may constrain the potential points of interconnection ("POIs") for future New Jersey OSW projects? Please describe the considerations related to utilizing SAA POIs and how OSW developers might switch from their queue positions (if already acquired) to the SAA-provided POI.

OW East response: The main concern is not necessarily about obtaining a PJM queue position at a specific POI as a result of a Board decision but rather the implications of the PJM Interconnection Process Reform that is currently drawing to a close. Under the proposed reform, generation developers will not be able to obtain a queue position until late 2025/early 2026. Having a position in the PJM New Services Queue, or a pathway to a queue position, prior to the BPU's next solicitation in early 2023 will be necessary in order for OSW developers to respond to the solicitation if some form of the SAA is not implemented.

¹ <u>PSD Hollandse Kust West; Appendix A (rvo.nl)</u> Sections 10 and 11



Without a queue position, OSW developers will not have visibility into the interconnection timeline or potential system upgrades, and no formal studies will have been completed by PJM. This will significantly increase the cost uncertainty factored into any OREC proposal that may otherwise be mitigated by a clearer path to interconnection.

Additionally, the BPU has identified certain onshore POIs for transmission developers to target. Through an Option 2 or 3 award, offshore POIs may also be established. However, it will not be clear until after award of the SAA projects where any new offshore POI may be located and what rules are established to govern OSW projects seeking to connect at those POIs including cost allocation. This further demonstrates the need for a decisive decision on the transmission paradigm for OSW after the SAA process is concluded. While OW East sees value in all options under consideration, we believe it is important for the BPU to award at least Option 1a projects at a minimum, as such solutions will resolve issues for the OSW industry caused by the timing of the PJM queue reform.

Finally, with regards to OSW developers switching any existing queue positions to the SAA-provided POI, OW East encourages the BPU to work with PJM to clearly establish a process that would enable any such switch. The current PJM tariff does have certain provisions that enable a project's POI to be substituted for another through the modification of an Interconnection Request process without the loss of queue position². However, the provisions only allow POI modification, if the change in POI is determined not to be a Material Modification. The tariff also seemingly does not specifically address substituting a POI as a result of factors external to the study process. Providing clarity to OSW developers on this process will be essential.

3. If the Board were to select one or more Option 2 proposals under the SAA—onshore substations to offshore collector platforms (see, the November 18, 2020 Board Order under this same docket for more information on the Options³)—please provide additional details and considerations for connecting and coordinating OSW generation projects in terms of the costs, timing and operability of the OSW generation projects.

OW East response: It would be most beneficial for the transmission developer to work with the OSW developer to come up with the most efficient and cost-effective design (i.e., working together on transmission technology requirements from lease area to the offshore collector platforms). This will ensure consistency in design decisions and avoid the need for additional equipment on the offshore collector platform if the systems are designed independently. This will also ensure that the appropriate amount of space is made available for the OSW project for components such as electrical bays, reactive power compensation equipment, control equipment, etc. A series of consultations should be held between the transmission developer and OSW developer on the design, however this engagement must include firm deadlines for design decisions to minimize potential for delayes to COD.

²Refer PJM Open Access Transmission Tariff Section 36.2A: <u>https://pim.com/directory/merged-tariffs/oatt.pdf</u> ³For more information, please see the PJM website at <u>https://www.pim.com/-/media/committees-groups/committees/teac/2021/20210505-special/20210505-item-01-new-jersey-offshore-wind-proposal-window.ashx</u>



During the construction and operations phases, various agreements will need to be negotiated and executed between the transmission owner and the OSW developer to enable access to the collector platform. Examples of such agreements already exist for European utilities such as TenneT's Connection and Transmission Agreement⁴.

4. If the Board were to select one or more Option 3 proposals under the SAA—offshore network connecting lease areas and substations to each other—please provide additional details and considerations for connecting and coordinating OSW generation projects in terms of the costs, timing and operability of the OSW generation projects.

OW East response: An offshore grid developed by multiple parties and allocated by the BPU OSW solicitation process creates some complications in terms of interconnection rules and specifications of the equipment. These complications impact cost, timing, and operability in various aspects, and should be prescribed to OSW developers to ensure that the OSW developers optimize their generation equipment according to the meshed grid prior to any OREC solicitation. Examples of factors to consider include:

- What rules will apply to allocation of interconnection capacity?
 - Overall, we agree with the operating principle that if the BPU pays for it, the BPU gets to decide who uses it. However, there are outstanding questions to be answered. Will the offshore Option 3 grid follow FERC open-access rules, the existing PJM tariff, or a new FERC-approved PJM tariff proposed by NJ BPU assuming that Option 3 is now a FERCjurisdictional transmission entity?
 - Will at-risk merchant generators or additional offshore capacity that is not under NJ BPU contract be allowed to use the Option 3 offshore wind platforms to inject power into PJM markets assuming that the offshore platform links can enhance the injection capabilities on individual platforms for energy-only injections from over-planted or repowered wind turbines in the coming decades?
- How will the construction activities of OSW developers and transmission developers be coordinated?
 - OW East believes that penalties on the transmission developer or compensation for the OSW generation developer need to be considered if there are construction delays during the installation of the offshore transmission system that causes a delay to the in-service date of the offshore generation. If more than one OSW generator will be utilizing a single offshore collector platform, we believe that the BPU will need to establish rules and procedures on how the multi-party crews will be required to work before OREC proposals are due if Option 2 or Option 3 is proposed.

⁴<u>https://www.tennet.eu/fileadmin/user_upload/Our_Grid/Offshore_Netherlands/November_2018_Offshore_Con_nection_and_Transmission_Agreement.pdf</u>



- How would the emergency repair services be performed such as, by whom and on whose equipment assuming there would be access restrictions on generation personnel/contractors to be on board the offshore collector station during emergency repairs?
 - The BPU, in collaboration with PJM and the owner/operator of the transmission system will need to establish a procedure on how the multi-party crews will be required to work before OREC proposals are due if Option 2 or Option 3 is proposed and if more than a single OSW developer will be asked to use an offshore collector platform as their primary POI. There should also be a clear cost causation, timeline requirements and financial cost allocation procedures that outline who would be responsible for the repairs and any lost generation revenues during unscheduled outages.
- If an export cable from one offshore platform is out, how would the multiple generators connecting into the common Option 3 offshore grid be dispatched/curtailed?
 - In onshore generators, the transmission outage and subsequent congestion is usually handled via congestion pricing via economic dispatch. However, the NJ OREC structure with a fixed price per MWh will render economic dispatch less useful as the generators are not price sensitive. There would need to be clear guidelines on how the curtailment and energy dispatch will be handled when multiple generators are connected to an offshore transmission network having lower transmission capability due to an outage.
- Will there be a lost-revenue provision for curtailed generation?
 - If an OSW developer chooses to build a radial line as a generator tie, any outage on that radial line and its lost revenue impacts would be borne by the offshore wind developer. However, if NJBPU asks offshore wind developers to bear the lost revenues from curtailed generation because the State's common offshore wind transmission system is experiencing an outage, the offshore wind generator will need to know the system parameters for fully as-built configuration of the transmission system before pricing the OREC offer. Otherwise, the risk premium from the unknown transmission risk would ultimately reflect on the risk premium in the OREC pricing.
 - If there is a fault at the offshore collector platform that impacts the connected generation, who would be servicing the affected generator lead lines from the turbines? A clear delineation of responsibility among the offshore transmission grid operator and the offshore wind generator needs to be outlined in the Option 2 and Option 3 operations manual, ideally before the OREC pricing is finalized so that the generator can factor its O&M requirements within its OREC pricing.

5. If an SAA Option 2 or Option 3 proposal is selected, is there any situation in which an OSW generation project would not be able to use the SAA Option 2 or Option 3 solution?

OW East response: We believe such a scenario is very unlikely due to the assumed cost advantage that OSW developers may realize by using the offshore transmission, however we note that if the structure of



the SAA is set up in a way that forces OSW developer to bear unacceptable levels of risk (both in terms of perceived construction delays, or perceived O&M risk), then OSW developers may choose to construct their own gen lead lines to participate in a New Jersey solicitation. To be clear, OW East believes that the utilization of SAA proposals will be positive for the industry, however we caution that the structure and clarity of the rules governing the SAA assets during the construction and operation phases will be important to establish as soon as possible.

6. How should the Board consider the optimal locations for Option 2 substations? Should such determinations occur at the time of the Board's SAA decision or following the Board's OSW generation solicitations? If the location is determined *after* the generation solicitations, what type of coordination between generation and transmission developers would be required?

OW East response: Optimal locations should be considered following the Board's OSW generation solicitations. This will enable the Board to work with the transmission developer(s) to site the offshore platforms in locations that enable the most cost-efficient development of the OSW generation project. For example, if the offshore collector platform is constructed too far from a lease area seeking to use the transmission, this may require changes in technical specifications such as larger export cable(s), higher operating voltages, additional reactive power compensation, switching from HVAC to HVDC technology, etc. All these changes could increase the cost of the OSW generation project.

Generation and transmission developers should work together to specify the transmission technology from lease area to the offshore collector platform and design the platform to enable connection of this technology. As previously stated, any such consultation should include firm deadlines for design decisions to ensure any delay risk to achieving COD is minimized. For example, if multiple OSW projects are connecting to a single platform, it would be more beneficial to identify a common HVAC operating voltage to ensure additional transformers are not needed at the offshore collector platform. This would also avoid extra weight, and therefore extra steel required for the collector platform substructure to minimize to some extent other risks such as limited vessels available for heavy lift operations.

7. Describe if and how the primary transmission line technology used for the Option 2 proposal, HVAC or HVDC, affects the development – timing, sizing, locational considerations, and costs –of new OSW projects.

OW East response: The selection of the primary transmission line technology for any Option 2 proposal may also dictate the transmission technology the OSW developer must use for its export cable system. For example, if an Option 2 proposal utilizes HVAC transmission, an OSW developer must consider if an HVAC export cable system is feasible from its lease area to the location of the offshore collector platform. In addition, the operating voltageof the Option 2 solution will be an important consideration, as the most cost-efficient means for an OSW project to connect to the offshore collector platform will be via the same transmission voltage as the infeed voltage. If, for example, the transmission utilizes 230 kV and the OSW project steps up to 275 kV to access the Option 2 soluiont, then additional equipment will be required at the offshore collector platform such as step-down transformers. We would note that we believe it is unlikely that any Option 2 proposal would be constructed using HVAC technology.



If the primary transmission line technology for an Option 2 proposal is HVDC, this would provide flexibility to the OSW project. The Option 2 proposal would already likely have an OCP so the OSW project would need to consider the interconnection voltage to the OCP. If the OCP is located a significant distance away from the developer's generation assets, then it is likely that the developer would need to construct its own AC collector stations to step up the power to a higher voltage before bringing it to the Option 2 OCP. Obviously, a less expensive option would be for developers to connect to the Option 2 OCPs via interarray cable voltage, however this would demand that the OCPs are located close to the generation assets, and likely in the offshore developer's lease area. OW East would be open to this approach if it proved to be the most optimal for ratepayers.

8. For an Option 2 or Option 3 scenario, do you believe that the selection of HVAC or HVDC will affect the ability to receive federal funding that may prioritize "innovative" technologies? Please address availability of federal funding for transmission and/or federally-backed loans/loan guarantees.

OW East response: This question seems to be, understandably, rooted in the statutory language underpinning the work and funding programs administered by the US DOE Loan Programs Office (US DOE LPO) that limits most of their efforts to "innovative" efforts and projects. And it is true that the LPO have clearly stated that HVDC projects would meet this test given the lack of widespread HVDC projects, especially in the offshore context, in the U.S. However, LPO staff have stated that they believe that the "innovative" requirement can be interpreted in a flexible manner, for example through use of a new and creative business structure, and therefore potentially could be applied to HVAC efforts. However, we note the openness of the DOE LPO staff, and in particular Jigar Shah, the LPO Director, to discussions of this point and all related questions and we urge direct engagement with them and him on this point.

9. Describe how risks of cable outages are managed with HVAC versus HVDC technology, particularly where using large single HVDC lines for any offshore segment.

OW East response: We interpret this question to mean cable outages for export cable systems rather than outages on cables for interconnectors to different platforms. Typically, an export cable system is sized to deliver a certain number of MW consistent with the lease area, or subdivided lease area, capability. HVAC cables are commonly sized to deliver between 400-450 MW per circuit whereas HVDC can deliver much more via a single (in the case of a monopole) or double (in the case of a bipole) circuit depending on operating voltage.

HVAC export cable systems typically offer some small amount of redundancy, but due to CapEx and permitting considerations, OSW developers typically will not install spare cables for projects utilizing HVAC. When there is an outage on one cable, the resulting drop in transmission capacity is around 400 MW. Assuming that multiple cables are not out due to their proximity on the seabed, some of the energy can be picked up by the remaining in-service cables so not all transmission capability is lost. HVAC cables can operate under "dynamic cable ratings" which could offer an increased rating of 20-30% higher than steady-state ratings for short periods of time.

HVDC export cable systems are designed based on the desired MW capacity and consist of converter stations on either end (both offshore and onshore, for example) with the DC circuit in between. For a symmetric monopole, only a single HVDC cable bundle is installed between converter stations. If there is



an outage on the cable bundle, all ability to deliver generation will be lost. For larger HVDC systems a bipole system may be considered (two cable bundles). Each pair of poles will have its own HVDC cable. If there is a fault on one of the cables approximately half of the total transmission capability is lost.

10. For an Option **2** or Option **3** scenario, please address whether an HVAC or HVDC would better integrate into a multi-state or multi-regional offshore wind transmission grid? Should coordination or future computability opportunities affect the Board's evaluation of proposals?

OW East response: The two primary advantages of HVDC are its lower line losses and controllability. If the BPU choses an Option 2 or 3 scenario, the controllability of HVDC could provide a significant benefit to any integration with a regional system or adjacent control area.

11. How does the selection of an Option 2 transmission solution affect the permitting risk for OSW generation projects? What about an Option 1b?

OW East response: While it is not completely settled, we believe there is a chance that an Option 2 solution could be considered part of an OSW generation project's federal permitting envelope and thus impact the approval of an OSW developer's Construction and Operations Plan (COP). Thus, any changes in Option 2 cable routing or converter station location post NJ BPU-award could have implications in the federal permit timelines based on the materiality of the proposed transmission changes. Having different incentives among transmission generation developers could create a complicated conflict of interest if either party decides to change the routing due to unforeseen circumstances.

An Option 1b project would give the federal permitting control on the export cable route modifications solely to the generation developer and therefore reduce the federal permitting risk among the parties to an extent.

We note that it would be optimal for NJ BPU to engage directly with BOEM on this subject, as the need for two projects (one transmission, another generation) to share the same permitting process could complicate both projects and needs to be further evaluated by BOEM staff.

12. Please share any other important risks associated with an Option 2 solution that can impact project development.

OW East response: Please refer to our response to question 1.

13. Through what mechanisms should the risk of Option 2 or Option 3 cable failures be allocated? Does the potential risk for failure impact the preference for HVAC versus HVDC cables?

OW East response: We believe that the interest of transmission developers and OSW generation developers should be aligned. If so, it is our view that both parties will seek to address outages as expeditiously as possible. One way this could be done is through the establishment of availability assurances and penalties on the part of the transmission developers. Another approach that could reduce risks and associated OREC costs would be for NJ to follow a model whereby OSW developers are protected from revenue losses associated with extended outages, or delays in the construction of the independent



transmission system. As previously mentioned, these types of models are in place in France and the Netherlands and have resulted in a system with robust competition amongst developers for offtake agreements.

Regarding HVAC vs. HVDC, we believe that HVDC will be a more optimal technology for the industry for the following reasons. For one, if linked via a meshed system with other HVDC platforms, HVDC's reliability performance is likely to be strong in the event of a cable failure. Secondly, we believe that finding suitable offshore cable routes and landing locations will increasingly be a challenge for the industry, and that leveraging HVDC will minimize the number of routes and landfalls needed for the state to meet its OSW goals. Lastly, HVDC will likely be a more cost-effective option due to the reduction in line losses and cable costs associated with HVDC.

14. If an Option 2 or Option 3 proposal is selected, please detail the potential reliability and economic benefits.

Please see previous comments.

15. For the build out of transmission facilities under the current generator radial lines approach, please provide additional details and considerations on the costs, feasibility, timing, and operability of requiring OSW developers of future projects to utilize certain specified technology types, including potentially identifying common Original Equipment Manufacturers, requiring mesh-ready offshore substations, or other future-proofing specifications. Further, please detail the anticipated coordination that would be required to eventually interconnect between mesh-ready substations, including any anticipated unavailability of OSW generation or other foreseeable risks.

OW East response: We agree in general with the idea of future-proofing specifications, however we counsel the BPU to consider these requirements only for technology that is essential to be common between developers. For example, in the recent past collector voltages were only 34.5 kV, as was the case for the Block Island Wind Farm⁵. As submarine cable technology advances, it is not unreasonable to consider that common inter-array voltages will increase to 132 kV. Should NJ BPU standardize collector system voltages across projects, it risks reducing the OSW developers' abilities to determine the most cost-effective design. Similarly, if the transmission system technology is required to be the same including HVDC or HVAC and operating voltage, this may cap or limit the maximum project size that can be proposed in any OREC solicitation. Such a scenario may also result in "stranded" capacity in a lease area that is able to generate more than this limit but result in the OSW developer determining that the small amount of remaining generation may not be economical to offer in any future solicitation. This would have a negative impact in helping the State of New Jersey achieve its offshore wind goals as ultimately less offshore wind generation would be available to procure.

As previously said in our answer to question 1, we would encourage the BPU to select offshore transmission projects that will enable an optimization of the transmission system to match the awarded generation resource that will utilize the transmission asset.

⁵ Environmental Report/Construction and Operations Plan submitted by Deepwater Wind, September 2012. <u>https://tethys.pnnl.gov/sites/default/files/publications/BlockIsland_2012.pdf</u>



16. For an Option 2 and Option 3 proposal, please provide additional details and considerations on the costs, feasibility, timing, and operability of requiring OSW developers of future projects to utilize certain specified technology types, including potentially identifying common Original Equipment Manufacturers, requiring mesh-ready3 offshore substations, or other future-proofing specifications. Further, please detail the anticipated coordination that would be required to eventually interconnect between mesh-ready substations, including any anticipated unavailability of OSW generation or other foreseeable risks.

OW East response: In addition to the response to question 15, we offer the following comments:

- Future-proofing specifications for an Option 3 proposal has the added consequence that the OSW project will need to make provision for additional equipment to ensure the appropriate meshed connection can be made.
- The introduction of a meshed grid will likely require complex control systems to ensure the control and distribution of the OSW generation is properly managed. This may require new interconnection standards to be developed as more stringent technical requirements may be needed to interconnect all the OSW generation in the offshore grid.
- Several interface agreements will be required since the OSW developer or transmission developer may need to provide access to their offshore platform for third parties for installation and O&M activities. Ownership boundaries, permitted accesses, liabilities, etc. will need to be carefully detailed and agreed, especially if/when more than one OSW developer utilizes a single offshore platform as its primary connection to the onshore grid.

We look forward to working with NJBPU to address these and other questions and implement a final transmission solution that advances offshore wind and New Jersey's public policies. If you have any questions concerning the matters discussed in these comments, please feel free to contact me directly.

Sincerely,

John Dempsey Chief Executive Officer, OW East John.Dempsey@oceanwinds.com