

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**LC 80**

In the Matter of

PORTLAND GENERAL ELECTRIC  
COMPANY,

2023 Clean Energy Plan and Integrated  
Resource Plan

DEEP BLUE PACIFIC WIND'S PGE  
IRP ROUND 1 COMMENTS

**I. INTRODUCTION**

Deep Blue Pacific Wind (“Deep Blue Pacific”) respectfully submits these comments on Portland General Electric Company’s (“PGE”) 2023 Integrated Resource Plan (“IRP”) and Clean Energy Plan (“CEP”) for consideration by the Oregon Public Utility Commission (the “Commission”). Deep Blue Pacific supports Renewable Northwest’s recommendation to direct PGE to develop and issue a long-lead time all-source request for proposals (“RFP”) at the end of 2025, and direct PGE to revise its preferred portfolio to reflect that the least cost, least risk solution to achieving PGE’s resource needs and carbon targets involves at least 2 GW of offshore wind.

Developers need a market signal from the Commission or utilities that Oregon is interested in offshore wind. Without a strong market signal, Deep Blue Pacific and other developers may hesitate to bid on an offshore wind lease in Oregon. Thus, inaction by the Commission and utilities could delay or possibly eliminate the option of offshore wind for utilities in Oregon or Oregon ratepayers. Offshore wind is a viable and least cost, least risk resource, but without a market signal now it may not be able to come to fruition for Oregon ratepayers. Thus, the Commission should adopt Renewable Northwest’s recommendations.

## II. DEEP BLUE PACIFIC WIND

Deep Blue Pacific is a partnership between TotalEnergies, a broad energy company with a growing portfolio of renewable assets, and Simply Blue Group, a pioneer in floating offshore wind with more than 8 gigawatts of floating offshore wind in development. The venture partners the offshore wind expertise of Simply Blue’s United States and Oregon-based leadership team with TotalEnergies’ resources and historic knowledge of offshore operations. Deep Blue Pacific’s aim is to deliver the benefits of proven floating wind technology at utility-scale, and provide reliable, cost-competitive clean power to Oregon and the Pacific Northwest. More information about Deep Blue Pacific Wind and the benefits of offshore floating wind can be read at [www.deepbluepacificwind.com](http://www.deepbluepacificwind.com).

## III. COMMENTS ON PGE’S IRP

### A. Background on Offshore Wind and Development Issues Facing Oregon

The offshore wind resource off the Oregon coast is world class, boasting the highest wind speeds off the coasts of the continental United States. An offshore wind auction in federal waters is anticipated in Oregon in 2024, which may result in up to three GWs being integrated into the Pacific Northwest grid along the southern Oregon coast.<sup>1</sup> Offshore wind is a natural resource that, if developed and harnessed, could bring significant benefits beyond the clean energy it would provide. According to the 2022 Oregon Department of Energy report on offshore wind, there are numerous benefits associated with offshore wind projects from an energy, community, and state perspective, but there are also several challenges that need to be addressed.<sup>2</sup> One of the

---

<sup>1</sup> See <https://www.boem.gov/renewable-energy/state-activities/Oregon>.

<sup>2</sup> Jason Sierman et al., *Floating Offshore Wind: Benefits & Challenges for Oregon*, Oregon Department of Energy (Sept. 15, 2022), available here: <https://www.oregon.gov/energy/Data-and-Reports/Documents/2022-Floating-Offshore-Wind-Report.pdf>.

most important variables of the future landscape is how the Commission intends to set the stage for investor-owned utility acquisition of long-lead time resources like offshore wind.

Offshore wind as a resource has the potential to play a key role in Oregon’s transition to 100 percent non-emitting energy. Offshore wind offers a much larger generating capacity than other renewables currently available. In addition to the higher capacity factors, it generates in a more consistent manner due to more constant and predictable wind speeds and at different times than solar and onshore wind, which provides important resource diversity and complements other renewables. It can also help displace the need for peaking capacity resources.<sup>3</sup>

Offshore wind projects are different than onshore projects with a unique set of challenges to reach commercial operation, which are not generally technical. Offshore wind, including floating offshore wind that will be built off the Oregon coast, is a proven technology. A primary challenge in Oregon is the lack of a clear regulatory and commercial path that will provide investors with the confidence to invest in this capital and engineering intensive industry. Offshore wind requires the investments of large sums of money throughout all phases of project development, including the acquisition of the lease area through a Bureau of Ocean Energy Management (“BOEM”) auction. Winning bids for five lease areas in a December 2022 floating offshore wind auction in California ranged from \$135 million to \$174 million, and an auction in Oregon could potentially see the same amount of interest and competition. Additionally, Oregon

---

<sup>3</sup> This is illustrated by examining the amount of non-emitting peaking capacity additions in PacifiCorp’s various portfolios. *See* Docket No. LC 82, PacifiCorp Amended IRP, Volume I Table 9.1 – Non-Emitting Peaking at 255 (May 31, 2023). Non-emitting peaking plants rely on future technologies that have not been developed and have an unknown cost. PacifiCorp’s offshore wind preferred portfolio variant P10 displaces 345 MW of non-emitting peaking capacity and selects the third lowest level of future technologies. The only portfolios with lower selection of future technologies are the “No future tech” portfolio and the “40 year gas life” portfolio.

needs major investment in supply chain infrastructure and ports to develop these offshore wind projects.

Offshore wind is a quintessential long-lead time resource. The permitting process, including the multi-step BOEM auction process, is an important but time intensive process.<sup>4</sup> Projects are designed and created fit for purpose before steel is put in the water. This requires a long planning, engineering, and environmental review process that is coupled with extensive capital outlays to place orders for the equipment needed. These long lead time and large upfront costs place a greater financial risk on developers relative to onshore projects.

The current resource procurement process in Oregon is not aligned with the challenges of offshore wind because it does not offer a path for contracting long-lead time projects prior to developers committing to substantial development costs. As a result, Oregon offshore wind projects may be delayed, not developed at all, or developed but not benefit Oregon ratepayers. It is also possible that projects that do get developed may be higher cost if the developers need to account for these uncertainties. Improvements in the procurement process for long-lead time projects can lower development risk, and therefore lower the ultimate project costs for utilities.<sup>5</sup>

The Commission can play a major role in removing this critical barrier by providing a viable pathway to commercial offtake, reducing risks, and lowering the costs for developers, the utilities, and ratepayers. It is important that utilities and the Commission demonstrate a strong

---

<sup>4</sup> BOEM: 1) identifies suitable offshore areas for wind energy development; 2) issues leases for development; 3) requests and reviews a site assessment conducted by the leasehold; 4) reviews the leaseholder's construction and operations plan; and 5) approves the construction and operations plan with appropriate conditions. At each stage of this process, key stakeholders have an opportunity to provide input and suggestions to BOEM.

<sup>5</sup> If the Commission can lower project risk for developers through improved IRP and RFP processes, then it is likely that developers will face lower required rates of return and lower finance costs.

interest prior to the auction in charting a mutually agreeable path toward ensuring that offshore wind can contribute to the least cost, least risk and most reliable approach to meet Oregon’s clean energy future. Thus, the Commission should: 1) direct PGE to develop and issue a long-lead time RFP in late 2025 after the Oregon offshore wind auction; and 2) require PGE to revise its preferred portfolio to reflect that offshore wind is part of the least cost and least risk preferred portfolio. In particular, the Commission directing PGE to conduct a long-lead time RFP after the expected late 2024 auction, will provide developers with more certainty before the auction to invest in offshore wind in Oregon.

## **B. How Other States Solved the Long-Lead Time Development Problem**

There are many lessons we can learn from offshore wind project development and resource procurement on the east coast and apply them to the Oregon market. Given the long-lead time needed to develop the project, including the necessary infrastructure to support the project, project developers need a long-term outlook, which helps de-risk some of the upfront capital expenses. Massachusetts, New York, New Jersey, and Maryland are examples of offshore wind procurements on the east coast that have provided market surety to developers, both in procuring the lease areas as well as embarking on project development activities prior to having a power purchase agreement or similar offtake arrangement complete. What is important to note is not just the solicitation date and the projected commercial operation date (“COD”), but also the understanding of when the procurement schedule was set (See Table 1: East Coast Offshore Wind Solicitation Schedule and Projected Commercial Operations Dates).

New Jersey has a goal of 100 percent clean energy by 2050 with a 7,500-megawatt (“MW”) offshore wind goal by 2035.<sup>6</sup> New Jersey’s first offshore wind solicitation was in Q3 2018 for 1,100 MW of capacity. The contract was awarded in Q2 2019, and the estimated COD for this project is 2025. However, in parallel with the first solicitation, New Jersey announced that they would hold a second offshore wind solicitation in 2020, and then published a long-term solicitation schedule through 2035.<sup>7</sup> The solicitation schedule has both the dates for anticipated solicitation as well as the capacity that will be sought. This market certainty has given developers and the supply chain suppliers enough confidence to evaluate options and start making investments because they know that New Jersey has a long-term view on offshore wind. With this long-term market certainty, New Jersey is now home to the first monopile fabrication facility in the United States, and major port infrastructure development is underway.

A similar story has played out in New York. While New York State Energy Research and Development Authority (“NYSERDA”) has not published a schedule of solicitations, it has set a 9,000 MW offshore wind target by 2035,<sup>8</sup> and it has held an offshore wind solicitation every two years since 2018.<sup>9</sup> NYSERDA is also unique in that it is a New York State public benefit corporation that is issuing these solicitations on behalf of the state. Thus, there is the added certainty to developers that New York will buy this power. Additionally, New York’s Governor

---

<sup>6</sup> See *Offshore Wind*, New Jersey Department of Environmental Protection (accessed July 26, 2023), <https://dep.nj.gov/offshorewind/>.

<sup>7</sup> *Governor Murphy Announces Offshore Wind Solicitation Schedule of 7,500 MW through 2030*, State of New Jersey Governor Phil Murphy (Feb. 28, 2020), <https://www.nj.gov/governor/news/news/562020/20200228a.shtml>.

<sup>8</sup> See *Offshore Wind for New York*, NYSERDA (accessed July 26, 2023), <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind>.

<sup>9</sup> See *Offshore Wind Projects*, NYSERDA (accessed July 26, 2023), <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/NY-Offshore-Wind-Projects>.

Hochul announced in her 2022 State of the State Address a \$500 million investment proposal for offshore wind ports, manufacturing, and supply chain infrastructure.<sup>10</sup>

Massachusetts has a goal of procuring 5,600 MW of offshore wind by mid-2027.<sup>11</sup> Solicitations have also been made nearly every two years since 2017. Two additional solicitations have taken place (2019 and 2021), and a fourth solicitation is scheduled for Q1 2024. The latest RFP will be issued jointly by the Massachusetts Department of Energy Resources and electric distribution companies in Massachusetts for 2,000 MW of offshore wind.<sup>12</sup> By issuing an RFP jointly with the Department of Energy Resources and electric companies, developers have more certainty. The first solicitation, which was issued in June 2017, was won by Vineyard Wind in May 2018. As of Q3 2023, Vineyard Wind 1 is under construction, and is anticipated to reach commercial operations in late-2023/early-2024.

*Table 1: East Coast Offshore Wind Solicitation Schedule and Projected Commercial Operations Dates*

Project	PPA/OREC	Developer	Solicitation	Award	Assumed COD
South Fork a	LIPA PPA	Orsted/Eversource	Jun-15	Jan-17	2024
South Fork b	LIPA PPA	Orsted/Eversource	Jun-15	Nov-18	2024
Skipjack 1	Maryland OREC	Orsted	Jan-16	May-17	2026
MarWin	Maryland OREC	US Wind	Jan-16	May-17	2026
Revolution Wind	Rhode Island PPA	Orsted/Eversource	Jan-18	Dec-18	2025
Vineyard 1a	Massachusetts	Avangrid	Jun-17	May-18	2023
Vineyard 1b	Massachusetts	Avangrid	Jun-17	May-18	2023
Empire wind 1	NY OREC	Equinor/BP	Nov-18	Jul-19	2026
Sunrise	NY OREC	Orsted/Eversource	Nov-18	Jul-19	2025
Ocean Wind 1	NJ OREC	Orsted	Sep-18	Jun-19	2024

<sup>10</sup> Governor Hochul Announces Nation-Leading \$500 Million Investment in Offshore Wind, New York State Governor Kathy Hochul (Jan. 5, 2022), <https://www.governor.ny.gov/news/governor-hochul-announces-nation-leading-500-million-investment-offshore-wind>.

<sup>11</sup> An Act Driving Clean Energy and Offshore Wind, H.5060, 192nd Leg. (Mass. 2022), available here: <https://malegislature.gov/Bills/192/H5060>.

<sup>12</sup> See Healey-Driscoll Administration Files Historic Draft RFP for Massachusetts' Fourth Offshore Wind Solicitation, Commonwealth of Massachusetts (May 2, 2023), <https://www.mass.gov/news/healey-driscoll-administration-files-historic-draft-rfp-for-massachusetts-fourth-offshore-wind-solicitation>.

Revolution Wind	Connecticut PPA	Orsted	Jan-18	Jun-18	2025
Revolution Wind	Connecticut PPA	Orsted	Jan-18	Jun-18	2025
SouthCoast I	Massachusetts PPA	Shell/OW	May-19	Oct-19	2027
Park City Wind	Connecticut PPA	Avangrid	Aug-19	Dec-19	2027
Atlantic Shores	NJ OREC	Shell/EDF	Sep-20	Jun-21	2029
Ocean wind 2	NJ OREC	Orsted	Sep-20	Jun-21	2029
Momentum	Maryland OREC	US Wind	Jan-20	Dec-21	2027
Skipjack 2	Maryland OREC	Orsted	Jan-20	Dec-21	2026
Commonwealth	Massachusetts	Avangrid	May-21	Dec-21	2027
SouthCoast II	Massachusetts	Shell/OW	May-21	Dec-21	2028
Empire Wind 2	NY OREC	Equinor/BP	Jul-20	Jan-21	2027
Beacon Wind	NY OREC	Equinor/BP	Jul-20	Jan-21	2028
Revolution Wind 2	Rhode Island	Orsted/Eversource	Oct-22	Jul-23	not known

**C. The Commission Should Direct PGE to Conduct a Long-Lead Time RFP in Late-2025**

Deep Blue Pacific supports Renewable Northwest’s recommendation for the Commission to direct PGE to develop and issue a long-lead time RFP in late 2025 after the Oregon offshore wind auction. Currently, there are no strong market signals from the Commission or the utilities to demonstrate Oregon wants to pursue offshore wind development or the development of other long-lead time resources. The states above had much stronger market signals prior to the auctions. These included specific offshore wind goals or targets, state-sponsored acquisitions, RFPs issued by a state agency/department, proposals to invest in offshore wind infrastructure, and more. The offshore wind industry understands that Oregon does not have anything equivalent, and is unlikely to, at least in the near term. However, this is an issue that the Commission can help address. With better market signals, offshore wind developers will be more inclined to invest in Oregon and help Oregon meet its clean energy goals.

The immediate solution that Deep Blue Pacific believes already fits into Oregon’s unique regulatory framework without bold changes is for the Commission to direct PGE to develop and

issue a long-lead time RFP after the anticipated 2024 auction. This RFP would test the conclusions in PGE's IRP that offshore wind is part of the least cost and least risk portfolio of resources for Oregon ratepayers. It will help provide developers with certainty before an auction to invest in offshore wind in Oregon and provide a market signal to developers that Oregon is interested in pursuing offshore wind. It will also be the first step towards providing price certainty to developers so that developers can ensure the project will be economic. This is a modest, incremental action the Commission can take now that would have a meaningful impact on spurring the development of offshore wind in Oregon.

**D. Offshore Wind is a Least Cost, Least Risk Resource and the Commission Should Direct PGE to Revise its Preferred Portfolio Consistent with Renewable Northwest's Preferred Portfolio**

Renewable Northwest's comments present analysis that demonstrates offshore wind is a least cost, least risk resource and should be included in PGE's preferred portfolio.<sup>13</sup> PGE's proposed Preferred Portfolio shows that its resource needs post-2030 are fulfilled through generic resources instead of evaluating specific resources.<sup>14</sup> This is because PGE's model directly or indirectly prevents other resources, including offshore wind and transmission expansions from being selected.<sup>15</sup> When PGE's constraints are relaxed, offshore wind, storage, and other variable energy resources are selected,<sup>16</sup> which results in the selection of almost 3 GW of offshore wind.<sup>17</sup> The Commission should direct PGE to use Renewable Northwest's preferred portfolio, which is Attachment A to Renewable Northwest's comments.

---

<sup>13</sup> Renewable Northwest's Round 1 Comments at 31-43 (July 27, 2023).

<sup>14</sup> Renewable Northwest's Round 1 Comments at 32, 34-35.

<sup>15</sup> Renewable Northwest's Round 1 Comments at 34-35.

<sup>16</sup> Renewable Northwest's Round 1 Comments at 35.

<sup>17</sup> Renewable Northwest's Round 1 Comments at 35.

The conclusion that offshore wind is the least cost, least risk resource is supported by a number of analyses, including PGE's own studies. PGE completed an analysis for the Oregon Department of Energy that demonstrates offshore wind is a least cost, least risk resource, even with an increase of \$58.80 per kW-year in transmission costs from PGE's base assumptions.<sup>18</sup> Renewable Northwest also tested this analysis against various sensitivities and offshore wind was still selected as least cost, least risk.<sup>19</sup> For example, in a sensitivity where the costs of offshore wind are 50 percent higher than the costs in the Oregon Department of Energy study, offshore wind is still selected.<sup>20</sup> Additionally, PGE's base case cost of offshore wind is higher than the National Renewable Energy Laboratory's estimates and offshore wind is still selected even with the higher estimates.<sup>21</sup> Offshore wind is still selected under a variety of studies with these conservative cost estimates further demonstrating offshore wind is least cost, least risk. The Commission should direct PGE to revise its preferred portfolio consistent with Renewable Northwest's preferred portfolio that selects offshore wind as least cost, least risk.

#### **IV. CONCLUSION**

Deep Blue Pacific appreciates the opportunity to submit these comments on PGE's 2023 IRP and CEP. The Commission should adopt Renewable Northwest's recommendation to direct PGE to develop and issue a long-lead time RFP in late 2025 and revise its preferred portfolio to reflect that offshore wind is part of PGE's least cost, least risk preferred portfolio.

---

<sup>18</sup> Renewable Northwest's Round 1 Comments at 36-38. Additionally, a study by NorthernGrid estimated transmission costs for offshore wind in southern Oregon at \$18 to \$27 per kW-yr, which is lower than the transmission costs is much lower than \$58.80 per kW-yr (see Renewable Northwest's Round 1 Comments at 39).

<sup>19</sup> Renewable Northwest's Round 1 Comments at 38-40.

<sup>20</sup> Renewable Northwest's Round 1 Comments at 38-40.

<sup>21</sup> Renewable Northwest's Round 1 Comments at 38-40.

Dated this 27th day of July 2023.

Respectfully submitted,

DocuSigned by:  
*Alana Duerr*  
CS0062E0035E45C...

Alana Duerr  
Deep Blue Pacific Wind  
Project Director  
920 SW 6th Ave, Suite 240  
Portland OR 97204  
Alana.Duerr@simplybluegroup.com

DocuSigned by:  
*Peter Cogswell*  
DCE0173D67BB46E...

Peter Cogswell  
Deep Blue Pacific Wind  
Director of Government & External Affairs  
920 SW 6th Ave, Suite 240  
Portland OR 97204  
Peter.Cogswell@simplybluegroup.com