



Oregon

Tina Kotek, Governor



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Jean Thurston-Keller, Project Coordinator
BOEM, Office of Strategic Resources
760 Paseo Camarillo, Suite 102
Camarillo, California 93010

550 Capitol St. NE
Salem, OR 97301
Phone: 503-378-4040
Toll Free: 1-800-221-8035
FAX: 503-373-7806
www.oregon.gov/energy

Subject: BOEM’s Request For Comments re: Draft Wind Energy Areas – Commercial Leasing for Wind Power Development on the Oregon Outer Continental Shelf (OCS)

Dear Ms. Thurston-Keller,

Thank you for the opportunity to provide comments in response to BOEM’s August 15, 2023 request for comments on the Draft Wind Energy Areas (WEAs) BOEM has identified as part of its Area Identification process for Commercial Leasing for Wind Energy Development on the Outer Continental Shelf (OCS) Offshore Oregon. The Oregon Department of Energy (ODOE) is the state’s energy agency with a mission to help Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and future generations.

ODOE’s comments are structured to provide information about floating offshore wind (FOSW) and its potential value as a new clean energy and transmission option to help decarbonize the power systems serving customers in states across the West – both inside and outside of Oregon. Clean energy and climate policies adopted by Western states, including Oregon^{1,2} – along with U.S. clean energy and climate policy goals,³ including specific federal initiatives and goals to help advance FOSW⁴ – are all contributing to the potential value that FOSW offers the regional power grid and state economies, particularly those states seeking to achieve 100% clean electricity and economy-wide decarbonization before mid-century.

¹ Oregon HB 2021 (2021) - Oregon’s 100% Clean Electricity by 2040 Policy (applicable to Oregon’s largest retail electricity providers - Portland General Electric & PacifiCorp).

<https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB2021>

² Oregon’s Climate Protection Program (targeting economy-wide decarbonization) – Administered by Oregon Department of Environmental Quality. <https://www.oregon.gov/deq/ghgp/cpp/pages/default.aspx>

³ White House Executive Order 14057 (2021) – U.S. policy goal to achieve a carbon pollution-free electricity sector by 2035 and net-zero emissions economy-wide by no later than 2050.

<https://www.federalregister.gov/documents/2021/12/13/2021-27114/catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability>

⁴ Federal Administration’s announced initiatives and goals specific to FOSW (2022) – U.S. Dept. of Interior goal to deploy 15 GW of FOSW by 2035; U.S. Dept. of Energy “FOSW Shot” initiative to reduce cost of FOSW to \$45/MWh by 2035. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/15/fact-sheet-biden-harris-administration-announces-new-actions-to-expand-u-s-offshore-wind-energy/>

Our comments are also submitted with the understanding that FOSW may have potential impacts to ocean users and the environment, and that many stakeholders – including other state agencies with expertise and regulatory authority over potential impacts – are raising important questions and concerns. We encourage BOEM to continue to address potential impacts through engagement with Tribes, state and local agencies, other stakeholders, and the public; as well as through environmental assessments of any potential Final WEAs and environmental impact statements on any potential construction and operation plans that may come later in BOEM’s process.

Our review of energy and transmission studies indicate that potential FOSW development on the Western edge of the regional power grid offers a uniquely valuable combination of energy and transmission diversity benefits to local coastal communities, the state, and the region. For example, ocean located large-scale generation could improve power grid reliability and resilience, while also potentially lowering the aggregate costs and risks for Oregon and other western states of achieving their clean energy and climate policies. At the same time, there are limited examples of existing FOSW projects and a multitude of challenges related to potentially developing energy projects at sea.

Considering the potential benefits and challenges of FOSW development, ODOE supports the goals of BOEM’s Area Identification process and leasing opportunity. We recognize and appreciate the years of data collection, analysis, and gathering of stakeholder input BOEM has undertaken with research organizations and potentially interested and affected parties since September 2019. BOEM’s multi-year engagement process has led to two Draft WEAs in federal waters adjacent to Oregon’s southern coast that have some of the strongest offshore winds in the country – Draft WEA-A (Coos Bay, est. ~743 MW potential) and Draft WEA-B (Brookings, est. ~1,922 MW potential).⁵ Combined, the two Draft WEAs could accommodate the potential development of an estimated 2.6 GW of FOSW capacity.

While there are additional BOEM process steps and much more power and transmission planning to be done before a FOSW project could be developed, at this stage the two identified Draft WEAs are steps towards Oregon’s twin offshore wind policy goals: 1) to plan for the development of up to 3 GW of FOSW within federal waters off its coast by 2030; and 2) that planning be conducted in a manner that will maximize benefits to Oregon while minimizing conflicts between FOSW, the ocean ecosystem, and ocean users.⁶

General Procedural Comments – Timing, Opportunity Value & Coordination Risk

ODOE supports the forward progression of BOEM’s competitive leasing process to assess commercial interest in developing potential FOSW projects adjacent to Oregon’s southern coast. While there are several remaining process steps and estimates of many years before a construction and operation permit could be approved, if at all, the progression of the leasing process is a critical element that informs and helps coordinate the long-term planning

⁵ BOEM Request for Comments, Aug. 14, 2023, pp. 15-16. <https://downloads.regulations.gov/BOEM-2023-0033-0001/content.pdf>

⁶ Oregon HB 3375 (2021) – Oregon’s Offshore Wind Policy, Section 1 (2)(a) and (b). <https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB3375>

conducted by power and transmission providers across the region, including those serving Oregon. These long-term plans help forecast the need for long-lead time projects like transmission expansion and FOSW – projects which could take 10+ years or more to plan and develop and are forecasted to be increasingly valuable, if not necessary, in the 2030s in order for power providers to meet their 100% clean electricity requirements under state laws (i.e., Oregon’s 100% clean by 2040 law, and Washington and California laws for 100% clean by 2045).

To meet the clean energy and climate policies adopted by Western states, including Oregon’s policies, energy studies and power planning consistently indicate the likely pathways to achieving these commitments include:

- Increased electrification of the transportation and building sectors – i.e., shifting away from fossil fuel use;
- Timely development of new and diverse renewable energy projects at tremendous scales (in addition to increased energy efficiency); and
- Timely expansion of transmission line infrastructure necessary to connect the vast buildout of new renewables to customers.

Studies consistently estimate the buildout of new renewable and transmission capacity needed across the Western power grid to meet states’ clean energy and climate policies is in the order of 100s of gigawatts (GW) by 2040.^{7,8} For context, the current sum of all the power capacity in the PNW region alone is roughly 60 GW, which was developed over the course of the past 100 years. In this light, BOEM’s leasing process for ocean areas adjacent to Oregon’s coast presents an opportunity value to the region’s power and transmission planners. As BOEM’s process progresses, power and transmission planning can also progress more readily and can account for FOSW more accurately in terms of FOSW’s potential value as a new renewable energy and transmission option to help optimize the cumulative scale, diversity, and pace of buildout necessary across the West before mid-century.

In other words – separate from the long-lead time of BOEM’s multi-year leasing, siting, and permitting process – the planning and development of FOSW and transmission projects also have long-lead times. This means that in order for FOSW and its supporting transmission infrastructure to be available in the 2030s to help meet the 100% clean energy requirements for Oregon and other states, BOEM’s process and the region’s power and transmission planning processes need to be well synchronized. While BOEM’s processes are not formally coordinated with the region’s power and transmission processes – if there’s limited progress in BOEM’s leasing process, then the region’s power and transmission planning processes may also be limited in their ability to successfully plan and take the near-term actions necessary to expand transmission infrastructure on timelines that match up with when any potential FOSW procurement and development off Oregon’s coast may be most valuable to power providers.

- **Power Planning Example.** An example of a power planning process involving OSW adjacent to Oregon is Portland General Electric’s (PGE) 2023 Integrated Resource Plan

⁷ 1 gigawatt (GW) = 1,000 (MW). The large Bonneville Dam east of Portland is roughly 1 GW.

⁸ 2021 Northwest Power Plan, NW Power & Conservation Council, pg. 51 (projecting 350+ GW of new renewable projects across the West by 2041) https://www.nwcouncil.org/f/17680/2021powerplan_2022-3.pdf

(IRP), which is currently in the regulatory review process with the Oregon Public Utility Commission (OPUC). PGE's IRPs forecast its need for new power supplies for the next 20 years. PGE, Oregon's largest utility, recently identified 1 GW of FOSW by 2035 as a potential least-cost and least-risk addition to their system.⁹ This occurred through PGE's IRP docket with OPUC,¹⁰ where there are currently active discussions about the near-term actions needed to ensure long-lead time projects, like planning & developing OSW & transmission, are progressing on timelines that match with when PGE is likely to need those resources to be available.¹¹ Underlying this discussion is the concern about long-lead time projects requiring well-coordinated planning actions and market signals. Power and transmission planning can inform markets and vice versa, similar to how BOEM's process can inform markets and vice versa.

- **Transmission Planning Example.** An example of a transmission planning process involving OSW adjacent to Oregon is Bonneville Power Administration's (BPA) 2022 Transmission Plan. BPA's transmission plans assess transmission reinforcement and potential expansion needs for at least the next ten years. OSW appears in three sections of the 2022 Plan – in discussion of reinforcement needs as a result of transmission service requests;¹² in discussion of potential transmission expansion as a result of its interconnection queue;¹³ and in discussion about the public policy driven studies BPA has done to validate that major transmission expansion is necessary to interconnect gigawatt-scales of OSW along Oregon's Southern Coast.¹⁴

Comments on the Draft WEA Process – Avoiding & Minimizing Potential Impacts

ODOE recognizes that BOEM's process for identifying Draft WEAs consisted of scientific, spatial analysis of – and public engagement to hear feedback and listen to additional input on – a multitude of critical factors crucial to identifying draft ocean areas that could: 1) best avoid and minimize potential adverse interactions with other industries or natural resources, and 2) also be suitable for FOSW development.¹⁵ ODOE appreciates BOEM's use of the NCCOS suitability model to support its spatial analysis, and that the complete description of the suitability modeling methods and results are publicly available in the draft BOEM/NCCOS Joint Report, "A Wind Energy Area Siting Analysis for the Oregon Call Areas."¹⁶

⁹ OPUC Docket No. LC 80: PGE 2023 IRP, PGE's Reply to Round 1 Comments, Sept. 6, 2023, pp. 75, 83 (roughly 250 MW per year beginning in 2032 through 2035). <https://edocs.puc.state.or.us/efdocs/HAC/lc80hac131341.pdf>

¹⁰ OPUC Docket No. LC 80: PGE 2023 IRP.

<https://apps.puc.state.or.us/edockets/DocketNoLayout.asp?DocketID=23636>

¹¹ OPUC Docket No. LC 80: PGE 2023 IRP, PGE's Reply to Round 1 Comments, Sept. 6, 2023, pp. 87 (discussion of near-term actions for long-lead time projects). <https://edocs.puc.state.or.us/efdocs/HAC/lc80hac131341.pdf>

¹² BPA 2022 Transmission Plan, Section 1.2.2, pg. 10 (Offshore wind TSRs amounting to 2.2 GW)

<https://www.bpa.gov/-/media/Aep/transmission/attachment-k/2022-bpa-transmission-plan.pdf>

¹³ BPA 2022 Transmission Plan, Section 1.3.1, pg. 12 (Douglas County coastal wind amounting to 3.1 GW)

<https://www.bpa.gov/-/media/Aep/transmission/attachment-k/2022-bpa-transmission-plan.pdf>

¹⁴ BPA 2022 Transmission Plan, Section 1.3.4, pg. 13 (ODOE & OPUC request to study 3 GW)

<https://www.bpa.gov/-/media/Aep/transmission/attachment-k/2022-bpa-transmission-plan.pdf>

¹⁵ BOEM Request for Comments, Aug. 14, 2023, pp. 8-9. <https://downloads.regulations.gov/BOEM-2023-0033-0001/content.pdf>

¹⁶ Draft NCCOS Report, August 2023. https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Oregon_WEA_Draft_Report_NCCOS.pdf

In addition to the spatial modeling described above, ODOE further appreciates that BOEM considered the following non-exclusive information sources in its identification of Draft WEAs:¹⁷

- Comments and nominations received on the Call for Information and Nominations;
- BOEM Oregon Intergovernmental Renewable Energy Task Force meetings
- Data Gathering and Engagement Plan for Offshore Wind Energy in Oregon
- Data Gathering and Engagement Summary Report: Oregon Offshore Wind Energy Planning
- Input from state and Federal agencies
- Comments received via consultation meeting and written comment from federally recognized Tribes
- Comments from Tribal outreach meetings with federally recognized Tribes
- Comments from relevant ocean users and stakeholders, including the maritime community, environmental NGOs, offshore wind developers and the commercial fishing industry
- State clean energy goals
- Domestic and global offshore wind market and technological trends
- OROWindMap data and information

ODOE is especially supportive of BOEM's continued work to avoid, minimize, mitigate, and monitor potential impacts to ocean users and the environment. ODOE appreciates that BOEM listened to input and feedback on, and thoughtfully considered, all the information referenced above during its process leading to the Draft WEAs off the coast of Coos Bay and Brookings. ODOE also recognizes and appreciates that any and all subsequent Final WEAs will be the subject of environmental review, including public participation, before commercial leasing.¹⁸

Specific Substantive Comments

Included as part of ODOE's specific substantive comments in this letter, by reference, are our prior "Call Area" comments submitted to BOEM in June of 2022.¹⁹ Please refer to our prior comments for more detailed information about specific energy sector topics and their implications for the planning and potential development of FOSW projects off Oregon's coast.²⁰

Summarized below are the key points from ODOE's prior comment letter that directly and indirectly relate to BOEM's request for comments on the two identified Draft WEAs (some of these points have been slightly modified to more closely relate to the request for comments on Draft WEAs rather than the Call Areas):

¹⁷ BOEM Request for Comments, Aug. 14, 2023, pg. 7. <https://downloads.regulations.gov/BOEM-2023-0033-0001/content.pdf>

¹⁸ BOEM Request for Comments, Aug. 14, 2023, pg. 17, "Before deciding whether leases may be issued, BOEM will prepare an environmental assessment (EA) under NEPA analyzing the Final WEAs (including public comment periods to determine the scope of the EA and to review and comment on the draft EA)." <https://downloads.regulations.gov/BOEM-2023-0033-0001/content.pdf>

¹⁹ "Comments from Oregon re: BOEM's Designation of FOSW Call Areas," June 27, 2022.

https://downloads.regulations.gov/BOEM-2022-0009-0219/attachment_1.pdf

²⁰ "Comments from Oregon re: BOEM's Designation of FOSW Call Areas," June 27, 2022, pp. 12 - 19.

https://downloads.regulations.gov/BOEM-2022-0009-0219/attachment_1.pdf

1. **Tremendous Clean Energy Buildout by Mid-Century:** There is a tremendous need for rapid development of gigawatt-scales of new renewable and transmission projects over the next several decades to meet the clean energy and climate goals of Western states as soon as possible. Balancing this need with the potential impacts of energy project development will be critical to successfully meeting the challenge of mitigating the effects of climate change.
2. **FOSW Helps Optimize Diversity & Trade-Offs:** FOSW can provide diversity and complementary value to land-based renewables and transmission. FOSW presents a valuable new option that can help power and transmission providers and states across the region to best optimize and balance the aggregate costs, risks, and potential effects of developing gigawatt-scales of new renewable and transmission projects on land and in the ocean. In addition to the energy value FOSW can provide toward clean power systems and meeting the decarbonization goals of Western states, FOSW can also provide non-energy values by reducing the need to develop all the necessary gigawatts of new renewable and transmission projects on land.
3. **Values and Costs:** Costs of FOSW should be considered in relation to the values it can provide. FOSW projects have significant costs related to infrastructure development projects, supply-chain development, and construction activities necessary to deploy FOSW projects and interconnect them to the grid. There may also be costs associated with potential impacts to ocean users and the environment from FOSW projects. Additionally, there may be costs involved with not developing FOSW projects - including societal and environmental costs of GHG emissions and climate change that deploying FOSW could help mitigate. All potential values and costs should be considered in decision-making on developing FOSW.
4. **Draft WEA Ocean Depths:** Regarding the identified water depths of Draft WEAs and costs of FOSW at depths greater than 1,300 meters, NREL and industry have identified this depth as the current technoeconomic limit for near-term commercial viability due to the step-change in costs associated with the steep slope and drop-off distance to 3,000 meters that quickly occurs beyond 1,300 meters. While floating offshore wind technology is rapidly evolving, the timing for when ultra-deep FOSW projects could be cost-effective is unknown and any forecasts are very uncertain. ODOE would be concerned if an effort to modify the identified Draft WEAs to include deeper waters would require significant delays in BOEM's current process and timeline.
5. **Draft WEA Sizes and Locations:** Regarding the size and location of the two Draft WEAs, ODOE is supportive – from an energy perspective – of BOEM's identification of the Coos Bay and Brookings Draft WEAs (Draft WEA-A and Draft WEA-B) because they are steps towards Oregon's twin offshore wind policy goals: 1) to plan for the development of up to 3 GW of FOSW within federal waters off its coast by 2030; and 2) that planning be conducted in a manner that will maximize benefits to Oregon while minimizing conflicts

between FOSW, the ocean ecosystem and ocean users.²¹ The two Draft WEAs contain high wind speeds and are proximate to available onshore transmission capacity. Therefore, in terms of potential energy values and transmission costs, they provide a suitable opportunity for potential FOSW projects to be economically viable for commercial development.

- 6. Timing and Coordination:** There are long-lead times associated with infrastructure development, supply-chain development, and construction activities necessary to deploy FOSW projects and interconnect them to the grid. FOSW involves many timing factors related to state decarbonization and clean energy goals; federal climate, clean energy, and FOSW goals; expiring federal tax credits; and coordination of FOSW planning activities with power and transmission providers and neighboring states across the region. Because delays could jeopardize meeting federal and state goals or qualification for federal tax credits, and because delays could also detract from coordination efforts with other states and entities, ODOE supports the forward progression of BOEM’s Area Identification process.

Conclusion

ODOE appreciates BOEM’s consideration of all the comments it receives in response to its request for comments on Draft WEAs – including the comments of Oregon’s state agencies. ODOE recognizes that floating offshore wind has the potential to provide tremendous value in achieving Oregon’s decarbonization and clean energy goals, and also recognizes that FOSW may have impacts to ocean users and the environment.

ODOE appreciates that BOEM’s engagement has centered around efforts to thoughtfully consider and balance Oregon’s need for rapid development of gigawatt-scales of new renewable energy and the potential impacts to ocean users and the environment that this scale of development could have. ODOE looks forward to continuing to collaborate with Oregon constituents, stakeholders affected by FOSW, Tribes, sister state agencies, state legislators, Oregon’s Governor and Congressional delegation, and BOEM in moving forward with thoughtfully assessing the opportunity for potential FOSW development off Oregon’s coast.

Sincerely,



Janine Benner
Director, Oregon Department of Energy

²¹ Oregon HB 3375 (2021) – Oregon’s Offshore Wind Policy, Section 1 (2)(a) and (b).
<https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB3375>