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### ACP-CA, Oceantic, OWC Comments on AB 3 Scoping Document

Additional submitted attachment is included below.







August 18, 2025

California Energy Commission 715 P Street Sacramento, CA 95814

Re: Docket No. 25-AB-03: Assembly Bill 3 (Offshore Wind Advancement Act)

# Comments from American Clean Power – California, Oceantic Network, & Offshore Wind California on the AB 3 Scoping Document for Port Readiness, Workforce & Supply Chain to Advance Offshore Wind

On behalf of American Clean Power – California, Oceantic Network, and Offshore Wind California ("Joint Organizations"), we are pleased to submit joint comments on the scoping document to implement Assembly Bill (AB) 3. Collectively, our organizations represent offshore wind developers including the five offshore wind leaseholders in California and the offshore wind supply chain. California's commitment to offshore wind was established in 2021 when the Legislature approved and Gov. Newsom signed AB 525, with support from a broad coalition of industry, labor, environmental, and environmental justice groups. The law identified offshore wind as an important part of the diverse clean-power portfolio the state will need to achieve its climate, clean-energy, and grid-reliability goals. It called for development of a strategic plan with a timeline and essential next steps for California to responsibly deploy this renewable energy resource – on ports, transmission, permitting, supply chain, workforce, and more. To further advance offshore wind, AB 1373 established a mechanism for the state to procure large-scale, long lead-time clean-energy resources, and AB 3 directed the California Energy Commission (CEC) to prepare reports on port readiness, and supply chain and workforce feasibility to achieve in-state assembly and manufacturing.

California and other states face unfortunate new challenges to the significant progress made on offshore wind with the Trump Administration's halt of new federal offshore wind leasing. The new Administration's executive order and subsequent actions by the Department of Interior to slow

permitting and other progress have increased uncertainties for the industry nationally. California's long-term vision remains strong and the state and industry continue to move forward the first five offshore wind projects with executed leases.

Over the past year and a half, California has made important strides to bring offshore wind online. With continued policy leadership and proper planning, the state can move offshore wind projects forward and ready the state for a successful industry in the long-term.

Our comments provide recommendations for how the CEC can implement AB 3 to support the state's long-term goals for offshore wind while charting a clear path for near-term success despite national uncertainties. We recommend the CEC prioritize filling analytical gaps that would hinder proper planning for the financing and development of offshore wind port and supply chain infrastructure. In three attachments to this letter, we provide recommendations for workshop panels and additional resources not included in the Aspen literature review as well as example lessons from east coast local content efforts.

#### Comments on Scoping Report 1: Offshore Wind Seaport Readiness Plan

The Joint Organizations support Aspen Environmental's conclusions in its literature review that there are no data gaps regarding the study of feasible port locations, alternatives, and prioritization based on physical requirements (Criteria 1-1, 1-2, 1-3). The studies on port feasibility commissioned by the State Lands Commission and incorporated into the AB 525 Strategic Plan provide a solid basis for the state's policy and investment support for offshore wind ports, with a strong focus on staging and integration (S&I) facilities. We also note that port environmental reviews, including CEQA and NEPA review for port expansions and upgrades, will provide additional port-specific information on potential impacts and mitigations to protect natural and cultural resources (Criteria 1-4).

For the Seaport Readiness Plan, the Joint Organizations urge the CEC focus on analyzing vessel requirements and ship-building opportunities (Criteria 1-6), S&I port development scenarios to facilitate offshore wind project construction, and the assessment of funding and financing strategies for these same S&I facilities.

Assess Vessel Requirements and Opportunities

Regarding Criteria 1-6, we encourage the CEC to explore floating offshore wind vessel requirements. Floating offshore wind construction and installation will require various specialized vessel types<sup>2</sup> which must meet both California Air Resource Board (CARB) emissions requirements as well as federal Jones Act<sup>3</sup> requirements. Unique vessels will be needed to transport major

<sup>&</sup>lt;sup>1</sup> See Prop 4, Notice of CEC Awards, SLC-Ports MOU

<sup>&</sup>lt;sup>2</sup> See <a href="https://cms.ore.catapult.org.uk/wp-content/uploads/2023/08/Assessment-of-vessels-required-to-serve-FLOW-in-the-Celtic-Sea.pdf">https://cms.ore.catapult.org.uk/wp-content/uploads/2023/08/Assessment-of-vessels-required-to-serve-FLOW-in-the-Celtic-Sea.pdf</a>

<sup>&</sup>lt;sup>3</sup>See https://cleanpower.org/wp-content/uploads/gateway/2021/02/12-1-21-Jones-Act-Infographic\_final.pdf

components for final assembly (such as floating foundations, offshore substations), to install anchors and mooring lines within the offshore wind farm, to install and bury electric cables, to install offshore wind substations, and to complete commissioning and hook up turbines offshore. California has not yet completed an assessment of floating offshore wind vessel needs to accommodate likely scenarios for project deployment. Thus, we recommend that the CEC include studies of vessel needs availability to determine likely vessel supply gaps.

Similarly, while the State Lands Commission Port Readiness study examined potential locations for manufacturing, operations and maintenance, and S&I port facilities, it did not examine California or West Coast capabilities for ship building. Therefore, this "second phase" port study should survey the current or planned vessel building capacity of California and West Coast shipyards, consider opportunities for expansion in California, and identify potential funding mechanisms. We also recommend examining potential synergies between assembly of floating foundations and existing or new shipbuilding capabilities in the state.

Analyze port development scenarios that reflect offshore wind development timelines

The CEC should consult with offshore wind developers and S&I port developers (Port of Long Beach and Port of Humboldt) to prepare a timeline and comprehensive financing strategy for port terminal funding and construction to ensure that new port facilities are ready on time and have the capacity to serve offshore wind project needs. Given the current uncertainties about when the first five offshore wind projects will commence permitting activities<sup>4</sup> and when and how many offshore wind projects will be under contract,<sup>5</sup> it is not possible to precisely predict when each leaseholder will need to use S&I facilities. In addition, while the state has set a 25 GW offshore wind goal and identified potential sea-space to achieve that goal, it is unclear when federal leasing opportunities might resume under the Bureau of Ocean Energy Management.<sup>6</sup> Thus, the CEC should develop a port readiness strategy based on different scenarios for how offshore wind project developers might proceed over the next decade.

We recommend the following three scenarios:

- Baseline: 5 offshore wind projects start construction between 2033 and 2035 timeframe
  - 5 projects (at 1.5 2GW each) are under contract by 2031
  - 5 projects initiate federal permitting by 2029
- Reduced: 2 offshore wind projects (at 1.5- 2GW each) start construction between 2033 and 2035 timeframe; 3 additional offshore wind projects start construction between 2037-2040

<sup>&</sup>lt;sup>4</sup> See January Presidential Memorandum and subsequent DOI memos and Secretarial orders related to wind and solar.

<sup>&</sup>lt;sup>5</sup> President Reynolds letter to Department of Water Resources, February 2025; Available at <a href="https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/ab1373/cpuc-ab-1373-procurement-request\_dwr.pdf">https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/ab1373/cpuc-ab-1373-procurement-request\_dwr.pdf</a>

<sup>&</sup>lt;sup>6</sup> See January Presidential Memorandum and subsequent DOI memos and Secretarial orders related to wind and solar.

- 2 projects are under contract by 2033
- 2 projects initiate federal permitting by 2031
- 3 additional projects are under contract by 2035
- 3 additional projects initiate federal permitting by 2033
- Expanded: 5 OSW projects proceed to construction between 2033 and 2035 timeframe (per Baseline scenario); and an additional 5 offshore wind projects start construction in 2038-2042 timeframe (to realize the state's full 25 GW goal)
  - Baseline scenario for first five projects
  - Second BOEM California auction held in 2031
  - 5 additional projects proceed to contracting and permitting in 2033-2036

Deploying offshore wind in California will depend on multiple private industries syncing with state and federal partners at the right time. By analyzing the port capacity needs for these three different scenarios, the CEC can inform appropriate timelines for port development – from permitting to financing and construction. This analysis will also help the state determine how port developers and offshore wind developers should align their development timelines and the role of the state in advancing major milestones for both types of development through state actions (e.g., deployment of Prop 4 funding, completion of offshore wind solicitations, commitment to state permitting timelines, etc.).

A scenario-based approach that examines interrelated development timelines will also illuminate when and how investment decisions are made for individual actors (e.g., ports, offshore wind developers, manufacturers) and how these critical decisions influence the overall timeline and project feasibility. For example, the UK's Floating Offshore Wind Centre of Excellence/Catapult report<sup>7</sup> illustrates how an offshore wind developer might require receipt of an executed power purchase agreement (or even achievement of Final Investment Decision (FID)) prior to committing to an agreement to use a port for construction, while the port itself must achieve its own FID earlier to be completed on time to serve the developer.<sup>8</sup> Assessing these potential critical path misalignments will help the state determine the types of interventions and support necessary under each development scenario.

Scenario-based analysis would also help right-size investments such that port capabilities are appropriately prioritized and phased-in to support the most likely schedule of offshore wind deployment over the next decade and a half. It will also create greater certainty for offshore wind developers that port facilities will be ready and available as projects progress closer to the start of construction. Finally, this approach could help spotlight near-term, least-regrets actions that the state could confidently pursue across all scenarios.

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<sup>&</sup>lt;sup>7</sup> Catapult Offshore Wind Energy, "Port Infrastructure and Manufacturing Investment Models" Available: https://fowcoe.co.uk/industry-insights/reports/port-infrastructure-and-manufacturing-investment-models/

<sup>&</sup>lt;sup>8</sup> Ibid pp 16-17.

#### Focus on port funding and financing

The Joint Organizations urge the CEC to investigate port financing and funding strategies. This analysis should be informed by the timeline development above to quantify and identify the most critical early port investments necessary under any scenario.

State funding that enables S&I ports to fund engineering, permitting, and other pre-construction activities in the next 6 months is critical under any of the above offshore wind development scenarios. The CEC should consider if any preliminary reporting of funding priorities should be an early product of AB 3, prior to completion of the two larger reports. For example, we recommend the CEC issue guidance on how it intends to manage and disburse Prop 4 port funding for offshore wind included in FY 2025-2026, no later than one month after final approval of that budget. We also urge the CEC's final approval and disbursement of the \$42 Million in AB 209 grants as soon as possible. These are vital investments to keep the Ports of Long Beach and Humboldt moving forward with their offshore wind planning and preparations. By no means should the development of AB 3 reports inhibit or delay disbursement of offshore wind port funding appropriated in the state budget or proposed for award.

Regarding the more fulsome analysis of funding and financing strategies required by AB 3, offshore wind stakeholders are generally aware that S&I port facilities (and later, manufacturing and O&M facilities) are capital intensive public infrastructure projects that will require multiple funding sources and mechanisms. However, the state has not yet prepared an assessment of the available funding and financing mechanisms which could support port investments.

This analysis should start with the port terminal business model: how does a port developer recoup costs and earn return on its investments in a new terminal? Are there alternative business models beyond typical "tenant" models that a port could pursue?<sup>9</sup>

The CEC should also evaluate state and federal programs (including current and potential future programs) that could provide grants or loans for port expansions and upgrades, or that provide guarantees to facilitate private financing. At the federal level, the CEC should investigate diverse funding opportunities, including federal support for enhanced shipbuilding, <sup>10</sup> transportation modernization, and to improve national defense capabilities, any of which may be compatible with offshore wind development. At the state level, the CEC should assess state bonding, the General Fund, or other special fund opportunities (i.e. the Greenhouse Gas Reduction Fund) and authorities as well as mechanisms to facilitate low-cost private funding. Given the important role of public finance in leveraging private capital, the CEC should discern how California could attract additional private finance with new policies or programs that reduce barriers to investment. <sup>11</sup> Finally, we

<sup>&</sup>lt;sup>9</sup> See also, <a href="https://www.scottish-enterprise.com/media/ksif11r4/port-investment-models-for-offshore-wind.pdf">https://www.scottish-enterprise.com/media/ksif11r4/port-investment-models-for-offshore-wind.pdf</a>

<sup>&</sup>lt;sup>10</sup> For example, the BBB included \$29 Billion for shipbuilding, focused on the US Navy.

<sup>&</sup>lt;sup>11</sup> See Catapult Catapult Offshore Wind Energy, "Port Infrastructure and Manufacturing Investment Models" Available: <a href="https://fowcoe.co.uk/industry-insights/reports/port-infrastructure-and-manufacturing-investment-models/">https://fowcoe.co.uk/industry-insights/reports/port-infrastructure-and-manufacturing-investment-models/</a>

encourage the CEC to look for case studies beyond the limited examples of offshore wind port development as there are likely other major infrastructure projects that faced similar financial risk scenarios that may hold applicable lessons for this study.

## Comments on Scoping Report 2: In-State Assembly, Supply Chain, and Workforce Feasibility Study

The Joint Organizations support Aspen Environmental's conclusions regarding the current lack of literature and analysis on the capabilities and opportunities for floating offshore wind supply chains. As a relatively new industry, <sup>12</sup> the floating offshore wind supply chain is also immature, although supply chain development is poised to accelerate globally. <sup>13</sup> The early-stage status of the floating offshore wind supply chain provides both opportunities and challenges for California and industry participants which must be carefully assessed ahead of setting any specific supply chain policy.

#### Defining Local Content

AB 3 requires the CEC to assess "the feasibility of achieving 50 percent and 65 percent in-state assembly and manufacturing of offshore wind energy projects." This "in-state" or "local content" requirement can be interpreted or defined in a variety of ways. Thus, we recommend the CEC first start by considering how it might define local content for the purposes of the AB 3 analyses. This process should begin by establishing the supply chain envelope, which should include:

- Components lists shared by all floating designs
- Vessel requirements and potential shipbuilding / retrofitting opportunities
- Sub-components and input materials for each floating design (e.g., concrete, rebar, corrugated steel, anchor cable, anchors, chains)
- Services required for finishing floaters (e.g., transportation, painting, towing)

The CEC should also consider the activities which make up the offshore wind industry, and thus domestic content. We recommend applying a broad definition of these activities, including:

- Construction and operation of ports and port terminals
- Construction and operation of transmission designed to interconnect offshore wind
- shipbuilding and vessel transport

<sup>&</sup>lt;sup>12</sup> From GWEC Global Offshore Wind Report 2025 at p 48, "At the end of 2024, a total of 278 MW net floating wind was installed globally, including 101 MW in Norway, 78 MW in the UK, 40MW in China, 27MW in France, 25 MW in Portugal, 5 MW in Japan and 2 MW in Spain."

<sup>&</sup>lt;sup>13</sup> Ibid p. 48"Floating wind was awarded 1.9 GW of capacity in 2024, of which 750 MW was in France through the AO5 and AO6 tenders across three floating projects, 750 MW was in South Korea to the Bandibuli project and 400 MW was in the UK via CfD Allocation Round 6 to the Green Volt project."

- Manufacture, transportation and logistics for Tier 1 to Tier 4<sup>14</sup> supply chain components
- Offshore wind project construction, including assembly of turbines and installation of turbines, substations and cables on and offshore

AB 3's 50% and 65% in-state manufacturing and assembly targets are ambitious given the nascency of the offshore wind industry. Therefore, it's critical to initially approach this analysis conservatively by using a broader definition for domestic content as a baseline. This approach represents a starting point on in-state manufacturing and assembly that the CEC can iterate on as the industry progresses.

Global supply chain status and local opportunities

Next, we recommend the CEC conduct a national and global supply chain assessment to determine:

- What manufacturing capacities for major components already exist?
- Where are significant gaps in supply that could hinder California's offshore wind goals (utilizing the planning scenarios above)?
- For which portions of the supply chain could California have a cost-competitive, strategic advantage? (Criteria 2-1, 2-2)

In addressing these issues, the CEC should also consider certain strategic questions, such as whether certain components would require standardization to stimulate local manufacturing and how this standardization is best driven (e.g., privately or through public policy). Component specifications have cascading effects upward through the supply chain such that standardization can either enable local supply by stimulating sufficient demand pipeline or inhibit deployment and project flexibility by limiting the options of a developer or supplier to accommodate project-specific needs and designs.

A second strategic question would be to consider whether there are opportunities for the manufacturing of major components (especially concrete and steel substructures and

<sup>&</sup>lt;sup>14</sup> We recommend applying Tiering definitions from NREL, <a href="https://docs.nrel.gov/docs/fy23osti/84710.pdf">https://docs.nrel.gov/docs/fy23osti/84710.pdf</a>, p. 3-4

<sup>•</sup> Tier 1: Finished components. Finished components are the major products that are purchased by an offshore wind energy project developer, such as the wind turbine, foundation, or cables. Tier 1 suppliers contract directly with the project developer.

<sup>•</sup> Tier 2: Subassemblies. Subassemblies are the systems that have a specific function for a Tier 1 component, which may include subassemblies of numerous smaller parts, such as a pitch system for blades. Tier 2 manufacturers contract with Tier 1 suppliers as a subcontractor or vendor.

<sup>•</sup> Tier 3: Subcomponents. Subcomponents are commonly available items that are combined into Tier 2 subassemblies, such as motors, bolts, and gears. Tier 3 manufacturers are typically vendors that provide components to Tier 2 suppliers.

<sup>•</sup> Tier 4: Raw materials. Raw materials, such as steel, copper, carbon fiber, concrete, or rareearth metals, are directly processed into Tier 2 or 3 components.

foundations) to be co-located with S&I ports to reduce costs, provide logistical efficiencies, and facilitate joint investment.<sup>15</sup>

#### Assessment of Volume & Requirements for Local Investments

Finally, to analyze and validate opportunities to localize manufacturing, we recommend the CEC perform both market analysis as well as supplier interviews to determine what factors could ultimately stimulate private investment in new manufacturing capacity. <sup>16</sup> This analysis should consider the "baseline," "reduced," and "expanded" offshore wind deployment scenarios proposed above and should include assessment of:

- The volume and term-of-demand pipeline required (e.g., how many components x over what time period)
- The level of demand certainty required for new investment (e.g., indicative demand vs. confirmed product orders)
- Location and site requirements for each type of manufacturing facility (e.g., vessel routes, workforce, port access) (Criteria 2-4)
- Appetite among potential suppliers to either build new capabilities in California or redirect
  existing capabilities (for Tier 2-3) to the offshore wind industry as compared to competitive
  opportunities to serve other industries

According to the Oceantic Network's Supply Chain Connect Database, <sup>17</sup> a voluntary supplier registry, over 580 California companies have self-identified as willing and capable to contribute to the offshore wind supply chain. The CEC should utilize this list to collect "bottom-up" insights on the type of businesses that could be involved in the industry in the future, including those businesses outside the standard definition of "supply chain companies," and to understand how and under what circumstances these businesses could participate in the offshore wind industry.

#### Assessment of cost and timeline impacts

We urge the CEC to devote significant attention to the study of likely cost and timeline impacts from the implementation of specific local content goals (Criteria 2-7 and 2-8). This assessment will not only inform whether the 50% and 65% in-state goals identified in AB 3 are feasible but also whether they are in fact desirable in the context of state's broader clean energy and affordability goals.

To assess cost impacts, we recommend the CEC assess the cost differences between global and (new) locally produced equipment and materials. These inputs could then feed into a capital cost

<sup>&</sup>lt;sup>15</sup> "Catapult Offshore Wind Energy, "Port Infrastructure and Manufacturing Investment Models" Available: https://fowcoe.co.uk/industry-insights/reports/port-infrastructure-and-manufacturing-investment-models/p. 1

<sup>&</sup>lt;sup>16</sup> This type of bottom-up scan could be performed by Bottom-up scan of could be delivered by known consulting firm in OSW (e.g., Xodus, BVG Associates)

<sup>&</sup>lt;sup>17</sup> See: <a href="https://oceantic.org/supplychain/">https://oceantic.org/supplychain/</a>

analysis to determine the likely impacts on the levelized cost of floating offshore wind. We recommend the CEC use a partial equilibrium model to determine the price effect for offshore wind projects and ratepayers for the following scenarios:

- 10% in-state assembly and manufacturing
- 25% in-state assembly and manufacturing
- 50% in-state assembly and manufacturing
- 65% in-state assembly and manufacturing

By assessing additional percentages, the CEC may be able to identify interim targets and provide recommendations on how to steadily increase domestic content over time. Otherwise, if the CEC only analyzes 50% and 65% targets, the results may show that it is too costly and complicated, which risks inhibiting further discussion on how to achieve desired local economic benefits in the next two decades.

To evaluate the timeline impacts of various local content scenarios, the CEC should assess the realistic timeline for standing up new manufacturing facilities in the state, from initial development of the business proposal, through permitting, construction, and procurement of materials. This analysis should differentiate between facilities producing Tier 1, Tier 2, or Tier 3 supply chain equipment as factories that require high-tech engineering and fabrication equipment may take considerably longer to build.

We also emphasize that the timeline to stand up new component factories is closely linked to the volume of local demand for those components. Through scenario analysis, the CEC may conclude it would only be feasible for a certain component manufacturer to develop a new local facility under the "expanded" offshore wind deployment scenario, while other component manufacturers may require an even greater west coast project pipeline.

#### Lessons-Learned from the East Coast

As California endeavors to deploy an offshore wind industry for the first time, we recommend that the state explore the successes and challenges of domestic content strategies and policies implemented by East Coast states (Criteria 2-7, 2-8). For example, New York and New Jersey have both required or strongly encouraged (by way of solicitation criteria) offshore wind developers to source certain Tier 1 components from new in-state manufacturing facilities. However, these premature local supply chain requirements drove up PPA prices and led to project and solicitation cancellations while factories failed to materialize, as briefly described in Attachment 3.

Developers of East Coast offshore wind projects have observed that states' early focus on building big, high-risk factories can result in supply constraints, cost increases, and delays while neglecting opportunities to take advantage of existing supply chains, local business communities, and local

<sup>&</sup>lt;sup>18</sup> See for example, <a href="https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00P8z000004Qqk9EAC">https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00P8z000004Qqk9EAC</a> and <a href="https://bpuoffshorewind.nj.gov/fourth-solicitation/solicitation-documents/Final-Solicitation-Guidance-Document-with-attachments.pdf">https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00P8z000004Qqk9EAC</a> and <a href="https://portal.nyserda.ny.gov/fourth-solicitation-documents/Final-Solicitation-Guidance-Document-with-attachments.pdf">https://portal.nyserda.ny.gov/fourth-solicitation/solicitation-documents/Final-Solicitation-Guidance-Document-with-attachments.pdf</a>

industrial capacity where organic growth could be more easily and affordably stimulated. Investment in new factories often hinges on offshore wind project maturation and is dependent on long-term, stable volume, but these factories also have their own permitting and development challenges that can compound project timelines and uncertainties.

State-by-state local content policies on the east coast also disaggregated the total U.S. offshore wind industry into individual state markets that cannot sustain enough volume individually to support manufacturing. Alternatively, by engaging existing local suppliers to deliver on existing product and service capabilities, East Coast offshore wind project developers observed opportunities to achieve local economic development benefits without increasing project costs and risks.

#### Conclusion

We thank the CEC for the opportunity to provide comments on its AB 3 Scoping Report and Literature Review. By taking a thoughtful, methodical approach to the second-phase port analysis and supply chain studies required by AB 3, the CEC can help the state plan to address primary barriers as well as opportunities for the successful deployment of the offshore wind industry while also considering the costs and benefits of achieving related state goals.

We look forward to continued engagement in this process.

Sincerely,

Molly Croll
Pacific Offshore Wind Director
American Clean Power

Nancy Kirshner-Rodriguez
Senior Director for Policy & Outreach
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Adam Stern
Executive Director
Offshore Wind California

#### ATTACHMENT1: SUGGESTED WORKSHOP PANELS AND TOPICS

- 1. Developers: Input on how projects can commit to certain utilization targets; experience and reflections from East Coast projects
- 2. California Businesses: Understand business needs required to scale up to deliver on offshore wind projects, over a phased approach
- 3. Permitting Agencies and NGOs: Go-Biz, CA High Road Training Initiative, CA Forward
- 4. Labor: How are PLAs developed, what do they provide for local communities, the region
- 5. Financing Partners: Including state-backed, private for profit, and non-profit financiers serving both infrastructure (e.g., CA Green Bank, IBank)
- 6. Tribal Nation partnership opportunities: Including best practices and opportunities for Section 17 Tribal Businesses.
- 7. Fishing: What are the opportunities for commercial fishermen and their vessels to participate and what upgrades may or may not be required of their vessel(s) to partake

#### **ATTACHMENT 2: RECOMMENDED RESOURCES**

- Catapult Offshore Wind Energy, "Port Infrastructure and Manufacturing Investment Models" Available: <a href="https://fowcoe.co.uk/industry-insights/reports/port-infrastructure-and-manufacturing-investment-models/">https://fowcoe.co.uk/industry-insights/reports/port-infrastructure-and-manufacturing-investment-models/</a>
- 2. Catapult, "Assessment of vessels required to serve floating offshore wind in the Celtic Sea." Available: <a href="https://cms.ore.catapult.org.uk/wp-content/uploads/2023/08/Assessment-of-vessels-required-to-serve-FLOW-in-the-Celtic-Sea.pdf">https://cms.ore.catapult.org.uk/wp-content/uploads/2023/08/Assessment-of-vessels-required-to-serve-FLOW-in-the-Celtic-Sea.pdf</a>
- 3. Scottish Enterprise, "Port Investment Models for Offshore Wind Available": https://www.scottish-enterprise.com/media/ksif11r4/port-investment-models-for-offshore-wind.pdf
- 4. Oceantic, "Suppliers' Guide to Success: Smart Scaling for the U.S. West Coast Floating Wind Market" Available: <a href="https://oceantic.org/suppliers-guide-to-success-smart-scaling-for-the-u-s-west-coast-floating-wind-market/">https://oceantic.org/suppliers-guide-to-success-smart-scaling-for-the-u-s-west-coast-floating-wind-market/</a>
- 5. Oceantic, "Offshore Wind Energy At Work, "Available: https://oceantic.org/jobstour/

#### **ATTACHMENT 3: LESSONS FROM THE EAST COAST**

Flexibility is critically important to ensuring offshore wind is deployed in a reliable, responsible, and affordable way. Offshore wind development requires careful execution of hundreds of steps.

Following a lease sale, there is: a minimum of 5-6 years of federal permitting, negotiation of U.S. and global supply chain contracts, securing vessels for each stage of project installation, completing land and interconnection agreements, hiring a workforce for engineering, construction, installation, operations and maintenance, and more. Extensive resources are deployed years in advance to ensure the logistics are in place to meet the specific sequence required to build an offshore wind project. A nascent offshore wind industry is not well-positioned to comply with stringent procurement programs that establish inflexible requirements (supply chain commitments, operational milestones, etc.) or interdependencies between disparate investments that drive up risk. This system can result in contract cancellations and re-bids and injects additional financial risk into the process.

For example, in 2023, New York State awarded provisional awards to three offshore wind projects. The project capacity, pricing, and construction timelines were predicated on major supply chain investments by General Electric and a larger turbine it planned to build with the help of state investment in New York. In 2024, GE announced that it was not moving forward with an 18 MW turbine or the planned manufacturing facilities on the Hudson River. NYSERDA announced that setback was the main reason no final awards were made. Similarly, New Jersey saw the consequences of connecting projects directly to manufacturing investments after a large offshore wind contract solicitation failed to adequately support expansion of a monopile facility at Paulsboro, New Jersey. In this example, one offshore wind project's delay hampered the factory's ability to expand, which endangered its ability to fulfill orders for other projects in its order book.

Offshore wind projects linked to new manufacturing facilities have significant added costs, and a manufacturing facility may fail if there are too few available contracts. Supply chain and manufacturing require long-term, predictable project pipelines, and the unsteady growth for demand in the U.S. have increased the risk to establishing domestic manufacturing and supply chain facilities. Increasing U.S. domestic supply requires consistent and reliable contracts for a durable period of time. Strict local content requirements have been failing strategies for offshore wind projects and manufacturers alike.