

THE NORTHWEST SEAPORT ALLIANCE
MEMORANDUM

MANAGING MEMBERS
STAFF BRIEFING

Item No.	10A
Date of Meeting	March 8, 2024

DATE: February 16, 2024

TO: Managing Members

FROM: John Wolfe, CEO

Presenters: Kate Nolan, Communications and Outreach Manager
Lindsay Wolpa, Senior Manager, Strategic Projects

SUBJECT: Offshore Wind Supply Chain Feasibility Study

A. SYNOPSIS

Since last spring's offshore wind (OSW) study session, NWSA staff have been learning more about how our gateway could support the growing offshore wind industry on the West Coast, namely thinking about potential business diversification opportunities to support California's build out of the proposed wind farms off the northern coast. As a component of that work, staff recognize the importance of understanding the specific capabilities of our facilities and how they could be utilized in this new supply chain. Through a competitive RFP process, staff selected Moffatt & Nichol, the premiere maritime infrastructure and engineering consulting firm.

B. BACKGROUND

As identified by the National Renewable Energy Laboratory, "The U.S. West Coast is ramping up offshore wind energy activities with a vision of deploying commercial-scale floating offshore wind power projects...Unfortunately, without needed upgrades, a lack of suitable port infrastructure could make it difficult to build major wind energy technology components domestically and install projects efficiently...There is still time to develop port infrastructure to support floating offshore wind energy deployment..." With this notion in mind, staff is facilitating an initiative to better understand our potential role in this rapidly growing industry as NWSA overall seeks opportunities to support a broad transition to a clean energy economy.

Following several commissioner engagements around the OSW industry, staff launched an RFP process last summer to identify a consultant to guide our work in determining how NWSA might participate in the West Coast OSW supply chain. Through this competitive process, Moffatt & Nichol were selected from a staff team including NWSA and representatives from both Homeports.

Given the complicated nature of this new industry and potential policy implications with how NWSA would engage, an ad hoc OSW Supply Chain commission work group was formed. The ad hoc group provided feedback to staff on how to best modify the proposed scope of work to balance various interests at the commission level resulting in the approach we will be sharing with commissioners at this briefing.

D. FINANCIAL IMPLICATIONS

- Estimated feasibility study total: \$188,500
- Contingency: \$18,850 (10 percent)
- Total: \$207,350
- Source: Executive department 2024 consulting budget

E. PREVIOUS ACTIONS OR BRIEFINGS

- Ad hoc committee report, February 6, 2024
- OSW study session, May 24, 2023

F. NEXT STEPS

- Launch study and continue educational opportunities.
- Commissioner updates as requested.
- Final report presentation.

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Offshore Wind Supply Chain Feasibility Study Briefing




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Presenter Names: Kate Nolan, Communications and Outreach Manager
Lindsay Wolpa, Senior Manager, Strategic Projects


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Briefing Overview

- Introduction, NWSA staff
- Study approach, Moffatt & Nichol
- Questions?



Picture courtesy of Moffatt and Nichol



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Background

- OSW supply chain provides **opportunity to diversify** NWSA business portfolio
- Industry engagement would support transition to **clean energy economy**.
- **Next steps** include ongoing industry education, tracking other stakeholder and tribal perspectives and feasibility study.



RWE, Galloper OSW Farm

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About Moffatt & Nichol



- › Family owned since 1945
- › Puget Sound offices since 1999
- › #1 Marine & Port Facilities consulting firm by *Engineering News-Record* in 2022 and 2023
- › 75+ years of marine and port experience
- › Deep bench of marine and port engineers
 - › 1100+ staff worldwide
 - › 54+ staff locally
- › Global with 45 offices working in more than 50 countries
- › Portfolio of more than 11,000 projects

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Team Experience



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Global OSW Ports Experience

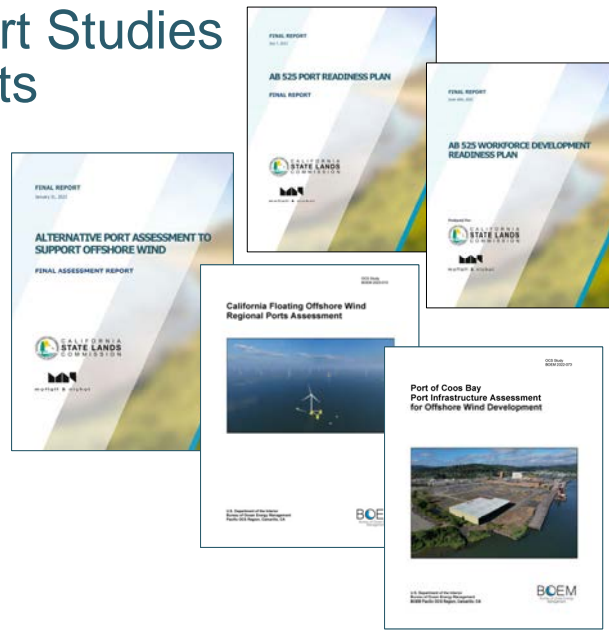


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US West Coast OSW Port Studies and Infrastructure Projects

- **U.S. West Coast Floating Offshore Wind Port Projects (M&N projects unless otherwise stated)**
 - Bureau of Ocean Energy Management, U.S. Pacific Outer Continental Shelf Region Offshore Wind Infrastructure Needs and Impacts
 - Port of Coos Bay Infrastructure Assessment for Offshore Wind Development (BOEM 2022-073)
 - California Floating Offshore Wind Regional Port Assessment (BOEM 2023-014)
 - California Floating Offshore Wind Regional Ports Feasibility Analysis (BOEM 2023-038)
- **California State Lands Commission and California Energy Commission, Assembly Bill 525 (AB 525) Offshore Wind Strategic Plan**
 - Alternative Port Assessment to Support Offshore Wind (2023)
 - AB 525 Port Readiness Plan (2023)
 - AB 525 Workforce Development Readiness Plan (2023)
 - Workshop on AB 525, Ports and Workforce Development to Support OSW (2023)
- **National Renewable Energy Laboratory, West Coast Ports Strategy Study for Offshore Wind (Project Website)**
- **California Energy Commission, Siting, Transmission, and Environmental Planning Support Contract (M&N is a subconsultant to Aspen Environmental Group), Support Development of a Preliminary Assessment of Economic Benefits of Offshore Wind (EIS-708-2022-06)**
- **Port of Humboldt, Redwood Marine Terminal Redevelopment for Offshore Wind (Project Website)**
 - Prime consultant for the engineering and permitting for the ~180 acre port redevelopment project
- **Humboldt County Economic Development Board, Humboldt Bay Offshore Wind Masterplanning Contract**
- **Port of Long Beach, Pier Wind Offshore Wind Terminal (Project Website)**
 - Prime consultant for engineering, technical studies, field data collection, 3D visualizations, and business/finance/project delivery strategy planning for the ~400 acre landfill project (Project Video, Conceptual Diagram)
- **Port of San Francisco, Pier 94/96 Offshore Wind Terminal, Conceptual Engineering, 95-acre Manufacturing Site**
- **Private Developer, California Offshore Wind Port Infrastructure and Supply Chain Study (2022)**
- **Private Developer, California Staging & Integration (S&I) Port Evaluation (2023)**
- **Private Developer, California Operations and Maintenance (O&M) Port Evaluation (2023)**
- **Washington Ports (Puget Sound, Columbia River, and Washington Coast)**
 - NWSA, Seattle, Tacoma, Everett, Anacortes, Bellingham, Olympia, Port Townsend (Puget Sound)
 - Vancouver, Longview, Kalama, Ilwaco, Clarkston (Columbia River)
 - Willapa Harbor, Port Angeles, Grays Harbor (Washington Coast)



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NWSA OSW Supply Chain Opportunities Study Approach

OSW Industry Outreach and Engagement

- › Outreach to OSW industry (Developers, Foundation Manufacturers, OEMs)
- › Identify industry needs and opportunities for NWSA
- › Estimate quantity and type of OSW port sites required in WA ports

NWSA Property Assessment

- › Develop Basis of Analysis for OSW Port Needs
- › Work with NWSA to identify sites that are or may become available for OSW use
- › Initial screening of potential port sites to develop a shortlist of preferred sites
- › High level engineering and environmental/permitting assessment of sites

Funding Assessment

- › Determine required site improvements, cost, and timeline
- › Identify funding opportunities for OSW ports including funding to date West/East/Gulf coasts

Final Report

- › Document outcome of the study including opportunities for NWSA



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