

New York Bight Task Force Meeting - Developer Updates



Presentation by US Wind, Inc.

ABOUT US

New York Bight Task Force Meeting - Developer Updates

Leading the offshore wind boom in the USA



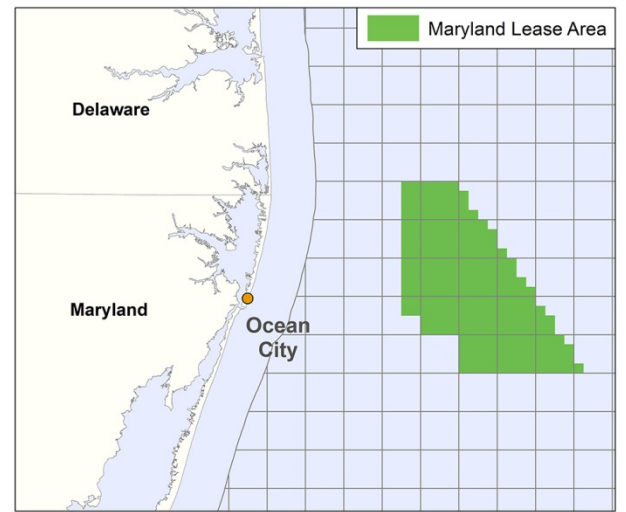
About us

US Wind was founded in 2011 and is fully owned by Renexia S.p.A., a leader in renewable energy development in Italy and a subsidiary of Toto Holding Group. Toto Holding Group has more than 40 years of experience specializing in large infrastructure construction projects, rail transportation and aviation.

US Wind is leading the offshore wind industry boom in the USA with two lease areas offshore Maryland and New Jersey. The project being developed offshore Maryland will create thousands of green energy jobs and is expected to go in operations in 2021.

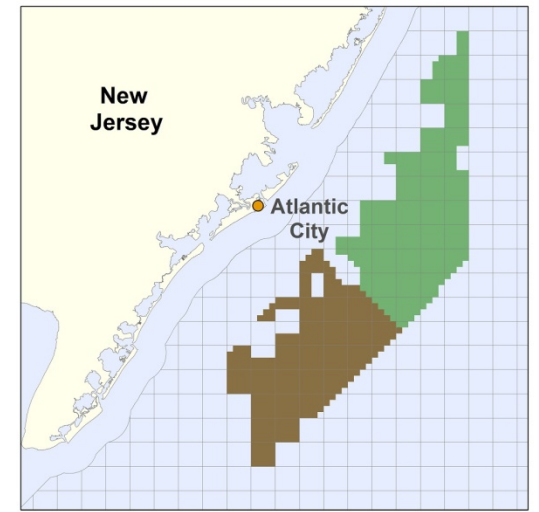
Maryland Project

A commercial lease sale for Maryland was held on Aug. 19, 2014. At the conclusion of the sale, BOEM announced that US Wind Inc. was the provisional winner of both leases, North Area (32,737 acres) and South Area (46,970 acres). In total, the WEA covers approximately 80,000 acres.



New Jersey Project

On Nov. 9, 2015, BOEM held a competitive lease sale for the WEA offshore New Jersey. US Wind Inc., was the winner of one of the two leases, the OCS-A 0499 (North Area). The North lease covers an area of approximately 183,000 acres.



Where are we now?

MARYLAND PROJECT – DEVELOPMENT STATUS

- OREC MD (completed);
- Survey Plan to BOEM (completed);
- Geophysical and Geotechnical Survey of the lease area (completed);
- Export Cable Routing Survey (completed);
- Preliminary Engineering wind farm & met mast (completed);
- Final Engineering Met Mast (completed);
- Site Assessment Plan (SAP) to BOEM (completed);
- Met Mast Fabrication (completed).

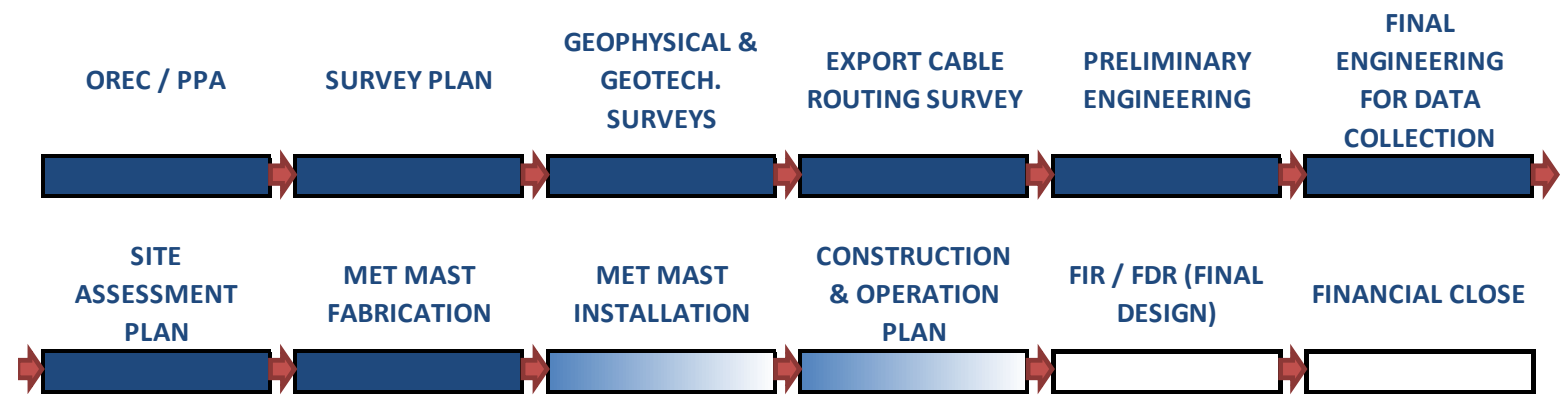
NEW JERSEY PROJECT – DEVELOPMENT STATUS

- OREC NJ (*in progress*);
- Survey Plan to BOEM (*in progress*);
- Preliminary Engineering & Permitting efforts (*in progress*) – more in detail:
 - Defined nameplate(s);
 - Evaluated WTG size & WTG model;
 - Evaluated two foundation types, actually being studied by Mott MacDonald & InfraEngineering;
 - Completed a screening of the point of interconnections by EN Engineering and defined two possible onshore substations;
 - Defined the routes from ocean to onshore substations;
 - Defined collection system (AC vs. DC) and cables size;
 - Completed a screening of available port & infrastructure;
 - Discussed with New Jersey Department of Environmental Protection about Project plans;
 - Discussed with New Jersey Economic Development Authority about available port & infrastructure, job creation, and possible sources of local content.

Next steps?

MARYLAND PROJECT – NEXT STEPS

- Construction and Operation Plan submission based on recently released RFPs (**early 2019**);
- Met Mast Installation (**Summer 2019**);
- Additional Geophysical Survey (**Summer 2019**);
- Final Geotechnical Survey (**Summer 2019** – anticipation of EPC phase);
- Facility Design Report & Fabrication and Installation Report (**to be started after COP**);
- Financial Close & Construction Start (**after FDR / FIR**).



NEW JERSEY PROJECT – NEXT STEPS

- Activities based on the outcome of recent OREC RFPs (mainly, nameplate size awarded);
- Financial Close in 2022/2023 – However, making leverage on experience and studies completed on the Maryland Project, USW will target a **2021** Financial Close for New Jersey.

Biggest Challenges?

ENVIRONMENT

- **Restrictions on activities and time of the year** – Some activities such as pile-driving are subject to environmental restrictions;
- **Other stakeholders** – E.g. fishing interests in the areas.

AVAILABLE PORT & INFRASTRUCTURE

- **No readily available areas** – There are some good spots along the East Coast for marshalling and manufacturing ports; however, none of them is available and fit to purpose at the present time;
- **Air draft** – The best locations still are not perfect and have challenges to be faced, such as the presence of bridges along the route, forcing to different installation strategies.

Maryland



New Jersey



New York



LOCAL CONTENT

- **Local jobs & investments** – USW is committed to achieve the highest return as possible to the local economy and this is a primary goal in our development plans;
- **Minority Business Enterprise** – Signed on August 14, 2017 a Memorandum of Understanding with MD PSC to involve small, minority & women businesses.

Table 5. Independent Estimates of In-State Economic Benefits
 (2015 \$ millions)

	US Wind		Skipjack
	Development & Constr'n	Operating Period	
Direct Expenditures	\$ 331.8	\$ 433.4	
<u>Indirect and Induced Sales</u>	<u>\$ 278.0</u>	<u>\$ 310.8</u>	
Total (\$ millions)	\$ 609.8	\$ 744.2	
Direct Employment	1,298	2,282	
<u>Indirect and Induced</u>	<u>1,636</u>	<u>1,833</u>	
Total Employment (FTEs)	2,934	4,116	
Tax	\$ 28.7	\$ 98.7	

DEVELOPMENT TIMELINE

- **Third-party activities & reviews** – Some activities are not directly under developer’s control (e.g. NEPA process).

Actions to address the challenges?

ENVIRONMENT

- **Early engagement** – USW is in advanced discussions with environmental groups. The aim of these discussions is to define all the potential risks coming from the planned activities and define mitigation strategies. Items being discussed:
 - **Temporal Restrictions** – No Pile driving between Nov 1 – Apr 30;
 - **Vessel Protocols** – Transit Speed to be limited to 10 knots;
 - **Exclusion Zones** – For activities with noise that could result in injury or harassment;
 - **Underwater Noise Mitigation** – Bubble curtains and similar;
 - **PSO on board** – Passive Species Onboard to be added to the crew (or crew to be trained);
 - **PAM on board** – Real Time Passive Acoustic Monitoring required.
- **Fishing industry** – Creation of a fishing liaison within USW's staff to have a direct communication, explain project activities, understand concerns, if any, define mitigation strategies.

AVAILABLE PORT & INFRASTRUCTURE

- **Clear definition of the requirements** – USW is in advanced discussions with turbine supplier, installation company, etc. to define the requirements and the best installation strategies to be adopted.

LOCAL CONTENT

- **Local jobs & investments** – Clear definition of the requirements within the RFPs;
- **Minority Business Enterprise** – Creation of an internal MBE liaison staff to have a direct communication, explain project activities, define requirements, understand capabilities.



THANKS FOR THE ATTENTION!

Any questions?

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