

Unsolicited Commercial Lease Request: WindFloat Pacific

BOEM Oregon Task Force Meeting

June 28, 2013

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Principle Power's Unsolicited Commercial Lease Request

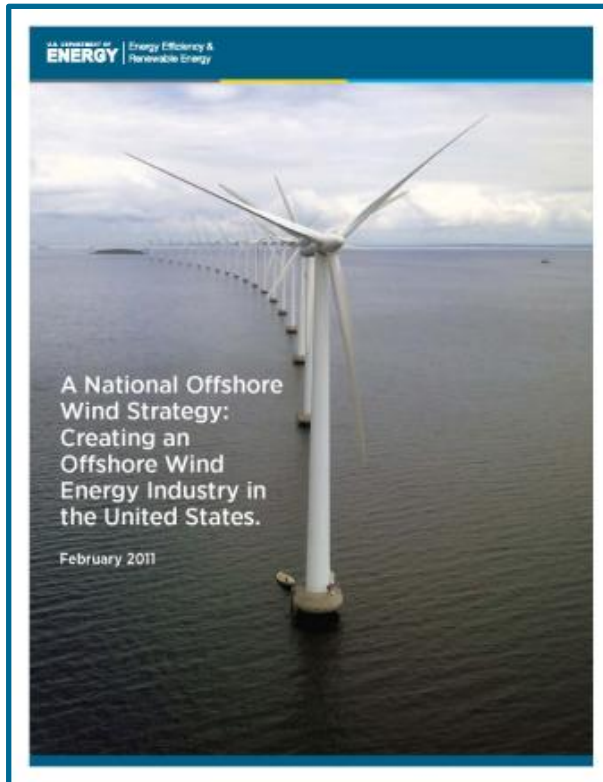
WindFloat Pacific Pilot Project

- Introduction to WindFloat Pacific
 - General Description of Facilities and Objectives
- The area requested for commercial lease
- General Schedule of Proposed Activities
- Data and Information
- Questions



Two Critical Objectives:

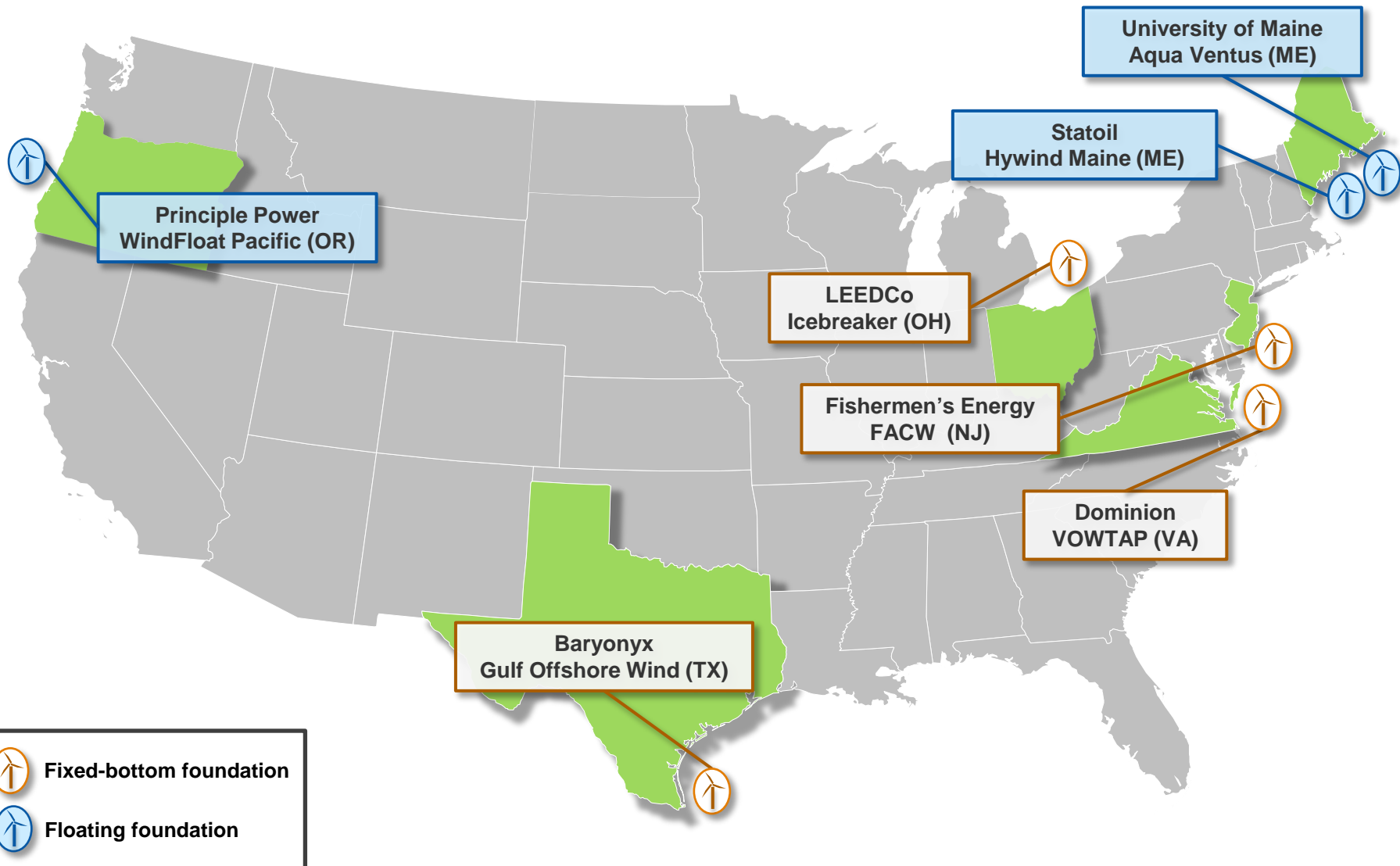
- 1) Reducing the cost of energy through technology development
- 2) Reducing deployment timelines and uncertainties



Prepared under DOI/DOE MOU

Announced 2011 by
Secretaries Salazar and Chu

Advanced Technology Demonstration Project Locations



Introduction to WindFloat Pacific

WindFloat Pacific Project

Principle Power, Seattle, WA

Project Highlights:

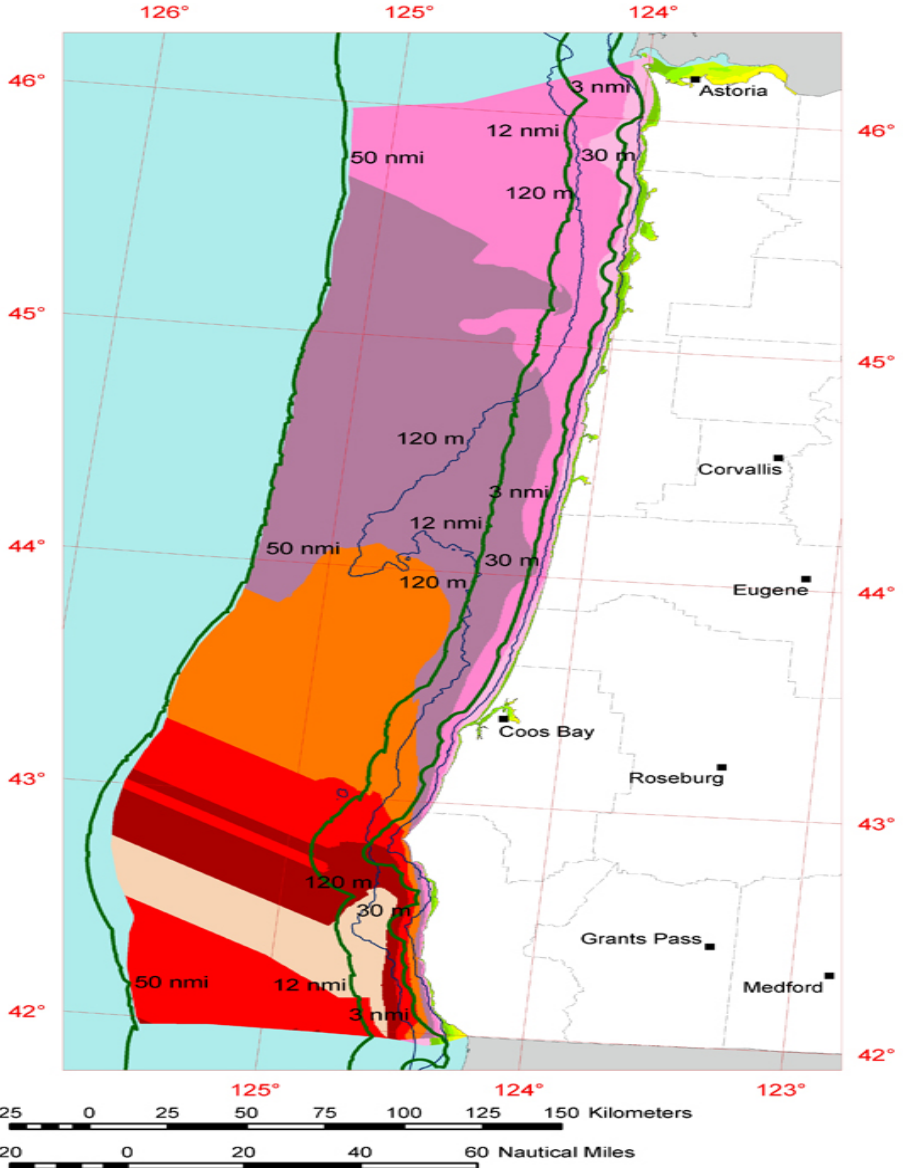
- 5 turbines
- Floating foundation
- Project builds off single smaller turbine project off Portugal
- DOE FOA project award in the Pacific
- Quayside construction and assembly
 - Shallow draft for tow-out
 - Ballasted at site
- Power Purchaser: Jordan Cove
- Install by 2017



Site Characteristics

Location	Oregon, Federal Waters
Number of Turbines	5
Turbine Rating	6 MW
Foundation Type	Floating, Semi-Sub
Depth	≈365 m (1,200 ft)
Distance from Shore	≈15 NM

Oregon 90 m Offshore Wind Speed



Contours

- Water Depth (Meters)
- Distance from Shore (Nautical Miles)

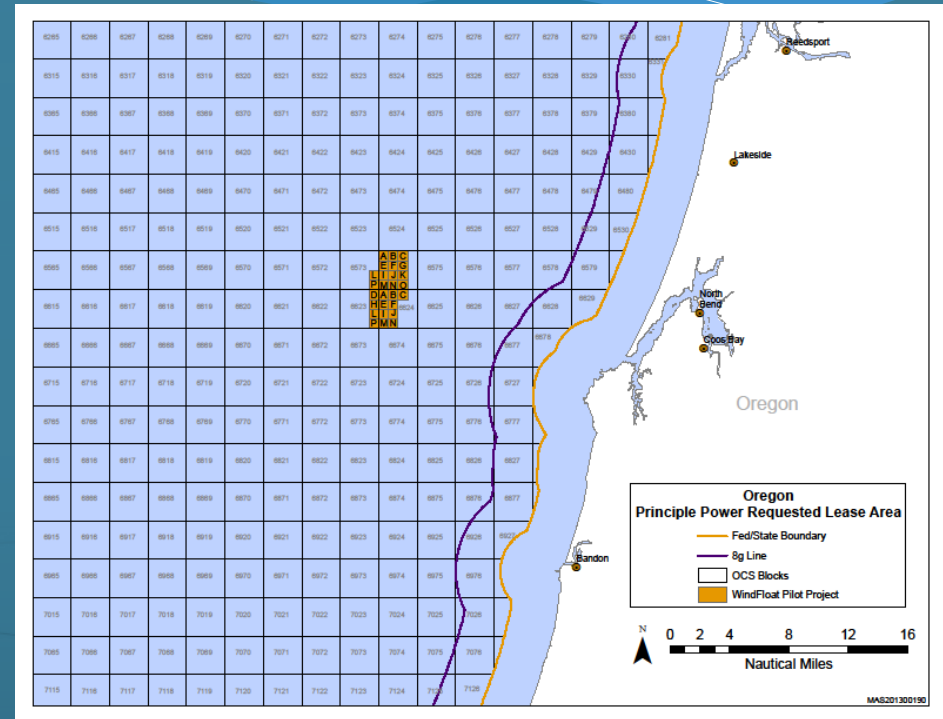
The offshore wind resource data was originally estimated by AWS Truepower as part of an onshore wind mapping project. These data have been interpolated to 90 m and extrapolated to 50 nautical miles by NREL.

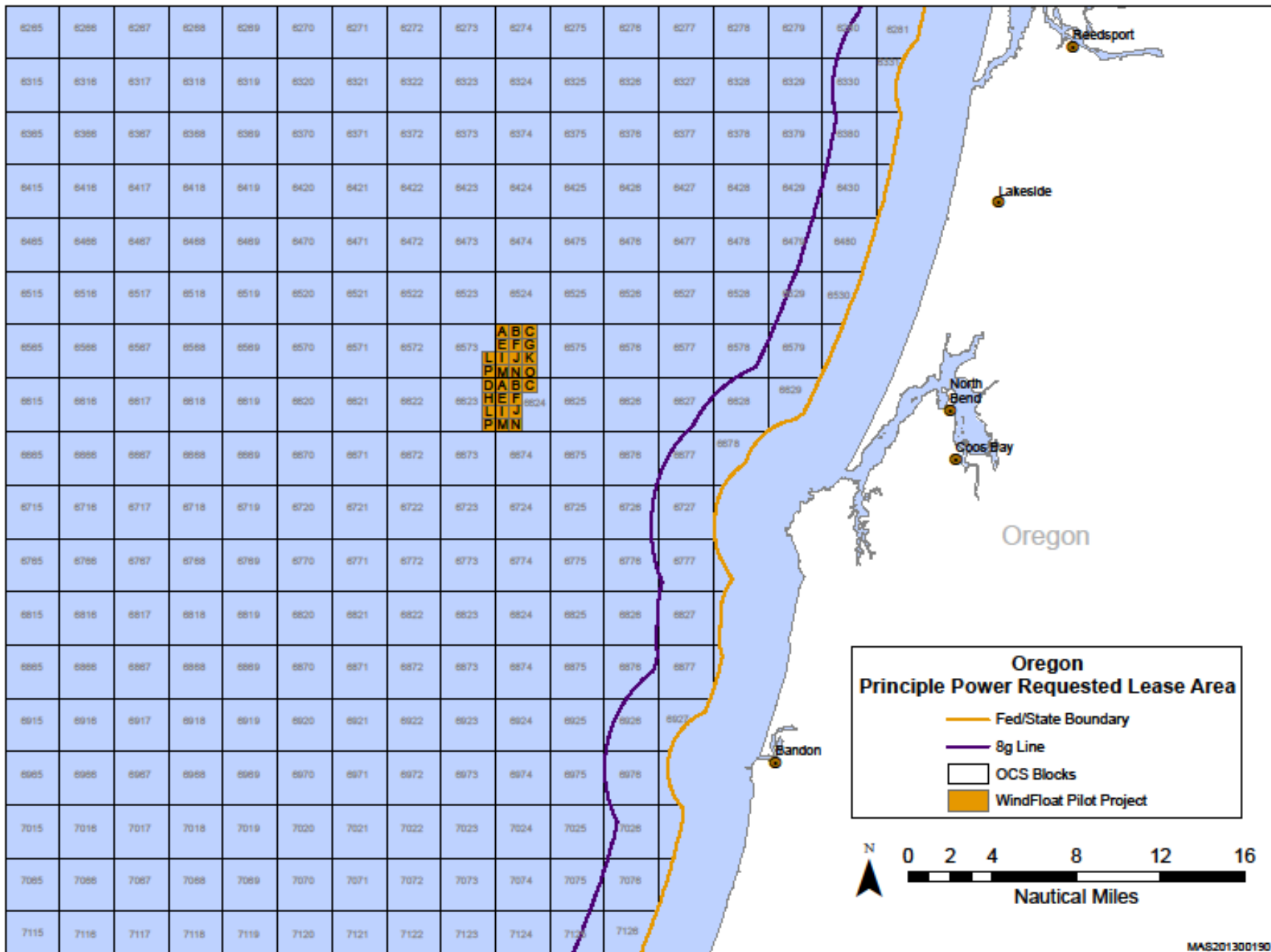
Wind Speed at 90 m

	m/s	mph
	11.5 - 12.0	25.7 - 26.8
	11.0 - 11.5	24.6 - 25.7
	10.5 - 11.0	23.5 - 24.6
	10.0 - 10.5	22.4 - 23.5
	9.5 - 10.0	21.3 - 22.4
	9.0 - 9.5	20.1 - 21.3
	8.5 - 9.0	19.0 - 20.1
	8.0 - 8.5	17.9 - 19.0
	7.5 - 8.0	16.8 - 17.9
	7.0 - 7.5	15.7 - 16.8
	6.5 - 7.0	14.5 - 15.7
	6.0 - 6.5	13.4 - 14.5
	0.0 - 6.0	0.0 - 13.4

Lease Area Blocks

- Protraction Coos Bay NK 10-01
- 9,608 acres, or 15 square miles
- Portions of OCS lease blocks 6573, 6574, 6623, 6624





General Schedule of Proposed Activities

- * The following timelines are subject to BOEM's regulatory process and task force deliberation
 - May 2013 – Unsolicited request for a commercial lease submitted to BOEM
 - Summer 2013 – BOEM publishes **Request for Competitive Interest**, public comment period; begin baseline studies
 - Fall 2013 – **Determination** of Competitive Interest/No Competitive Interest. If noncompetitive determination is rendered, Principle Power has 60 days to submit a Site Assessment Plan (SAP); **continue baseline site characterization studies** to prepare for COP submittal

General Schedule of Proposed Activities

- * The following timelines are subject to BOEM's regulatory process and task force deliberation
 - Fall 2014 – Applicant submits a **Construction and Operations Plan (COP)**; BOEM begins NEPA analysis; BOEM conducts completeness review of COP
 - 2016/7 – Construction & installation begins
 - By end of 2017 – Commercial operations

Data and Information

- *Protecting the Oregon Coast – Identifying and Protecting Important Ecological Areas*. Oceana, 2011
- Oregon Marine Map, Oregon Coastal Management Program
- RecFIN: Recreation Fisheries Information Network, Pacific States Marine Fisheries Commission
- USFWS 2013 federally listed, proposed, candidate species & species of concern which may occur in Coos County, Oregon
- PaCOOS: West Coast Habitat Portal, NOAA Fisheries, NW Fisheries Science Center, 2013
- Developer will conduct further studies to provide sufficient data for BOEM environmental reviews and NEPA compliance, such as high-resolution geophysical and geological surveys, geotechnical surveys, archaeological surveys, biological and benthic surveys, etc.

Questions?

Up next, BOEM's environmental review process...