New York State Offshore Wind Master Plan

BOEM New York State Task Force Meeting
October 3, 2017
New York State Energy Plan – 2030 Clean Energy Goals

40% Reduction in greenhouse gas emissions from 1990 levels
Reducing greenhouse gas (GHG) emissions from the energy sector—power generation, industry, buildings, and transportation—is critical to protecting the health and welfare of New Yorkers and reaching the longer term goal of decreasing total carbon emissions 80% by 2050.

50% Electricity will come from renewable energy sources
Renewable resources, including solar, wind, hydropower, and biomass, will play a vital role in reducing electricity price volatility and curbing carbon emissions.

23% Decrease in energy consumption in buildings from 2012 levels
Energy efficiency results in lower energy bills and is the single most cost-effective tool in achieving clean energy objectives. 600 trillion British thermal units (TBtu) in energy efficiency gains equates to a 23% reduction from 2012 in energy consumption in buildings.
New York State will commit to building:

up to 2,400 megawatts of offshore wind power by 2030, which will generate enough power for up to 1.2 million homes.
Offshore Wind Master Plan

A comprehensive State roadmap for advancing development of offshore wind in a cost effective and responsible manner

Key Elements

• Public engagement

• Environmental, social, regulatory, economic, and infrastructure related studies

• Site identification and guidelines for developers

• Analysis and support for cost effective electricity purchase
Master Plan
Offshore Study Area
Initial Offshore Wind Zones for Consideration
Area for Consideration Identification Process

Step 1: Identify Zones

B
C
D
E

Step 2: Order Zones by Preference

1st: E
2nd: D
3rd: C
3rd: B

Step 3: Identify Regional Preferences Within Zone(s)

Step 4: Locate Nominal Sites within Regional Preference

Z
Public Engagement

- Commercial and Recreational Fishing
- Consumer Advocates
- Elected Officials
- Indigenous Nations
- Labor and Business
- Long Island and New York City Communities
- Non-Governmental Organizations
- Offshore Wind Energy Industry
- State and Federal Agencies
- Submarine Cables and Offshore Infrastructure Owners
Technical Studies and Siting Summaries

• Offshore Wind Master Plan will be supported by 20+ studies, informed by:
  • State, federal and academic data sets and models; published literature; stakeholder feedback; published GIS, etc.

• Draft studies provided to external reviewers, including:
  • Indigenous Nations
  • Federal Agencies: BOEM, USFWS, NOAA, USACE, USCG, USDOD, ACHP
  • State Agencies: NYSDOS, NYSDPS, NYSDEC, NYS Parks, NYSEDC, NYSDOL, NY/NJ Port Authority
  • NGOs: NWF, NRDC, TNC, WCS, CCE, Audubon, Uprose, Surf Rider
  • Other: Legal, 3rd party technical review, fishing groups/Captains, etc.

• Some study reviews were supported by webinars

• Reports are being edited based on comments now

• Studies that influence spatial representation distilled into Area for Consideration identification work

• Each study area is based on different types and granularity of data, and requires independent consideration relating to potential conflicts
## Master Plan Studies and Surveys

### Environmental
- Marine Wildlife Survey
- Sea Floor and Benthic Survey (Mapping and Environmental Assessment)
- Birds and Bats
- Environmental Sensitivity and Permitting Risk Analysis
- Fish and Fisheries
- Marine Mammals and Sea Turtles
- Metocean (Wind, Waves, and Current) Characterization
- Sand and Gravel Resources

### Social and Regulatory
- Aviation and Radar
- Grid Interconnection
- Health and Safety
- Shipping and Navigation
- Marine Archeology and Cultural Resources
- Onshore Permitting Constraints
- Recreational Uses
- Visual Simulation

### Economic and Infrastructure
- Economic Development, related to:
  - Jobs and Workforce Skills
  - Manufacturing Assets
  - Port Infrastructure
- Pipelines, Cable, and Third Party Infrastructure
- Ports and Supply Chain
- Vessels
- Project Cost Projections
Geological and Physical Environment
Birds and Bats
Marine Mammals – Low-Frequency Cetaceans
Marine Mammals – Mid-Frequency Cetaceans
Environmental Sensitivity
Fish Core Biomass
Essential Fish Habitat
Commercial Fishing – VMS Data
Commercial Fishing – Observer Data
Commercial Fishing – Interview Data
Cables, Pipelines & Infrastructure
Shipping and Navigation
New York State identified an Area for Consideration and requests that BOEM identify and lease at least four new Wind Energy Areas (WEAs) within the area, each capable of supporting at least 800 MW of offshore wind.

Balance of factors, including, but not limited to:
- Commercial Fishing
- Cost
- Cables and Pipelines
- Environment and Wildlife
- Grid Interconnection
- Visibility
Indicative Areas

Space is illustrated with the requested new WEAs and how they could be located within the Area for Consideration. The WEAs depicted may be shifted, reshaped or both.
Indicative Areas
Next Steps and Public Input Opportunities

Below are examples of public input opportunities for offshore wind projects in New York State.

**New York State**
Examples of opportunities for public input as part of the state permitting process:

- **NYSERDA**
  - Master Plan Open Houses
- **Department of Public Service**
  - Certificate of Environmental Compatibility and Public Need under Article VII for transmission facilities
  - Procurement filings
- **Department of State**
  - Federal Consistency Certification under the Coastal Zone Management Program
- **Office of General Services**
  - State Submerged Lands Basement under the NY Public Lands Law
- Other potential engagement opportunities may be available for specific offshore wind projects

**Federal Agency**
**BOEM**
**BUREAU OF OCEAN ENERGY MANAGEMENT (BOEM)**

- Wind Energy Area Identification Process
- Environmental Analysis
- Leasing
- Site Assessment
- Construction and Operations

2,400 MW by 2030

Project Construction and Development