FERC Regulatory Perspective

BOEM Offshore Renewable Energy Workshop

Sacramento, CA

July 29-30, 2014

What FERC Does

- Electric Power
- Oil Pipelines
- Natural Gas
- Hydroelectric Projects

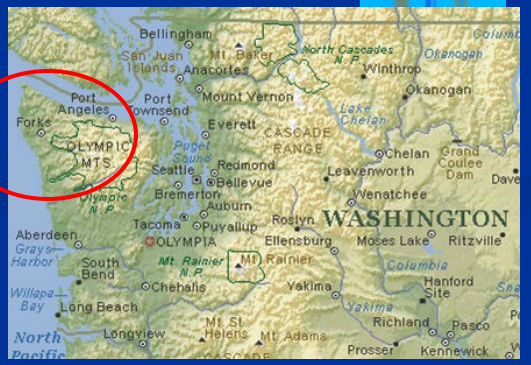
Mission: Reliable, efficient, and sustainable energy for consumers

FERC Hydropower Jurisdiction
Federal Power Act

- License non-federal hydropower projects
  - Located on a navigable waterway
  - Occupy lands of the United States
  - Use surplus water from a federal dam
  - Affect interstate or foreign commerce

FERC Jurisdiction: Ocean Energy

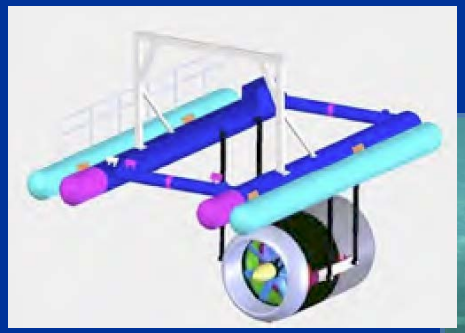
- AquaEnergy Group (Finavera)
  - Makah Bay Project, WA, DI02-3, Oct. 2002/Feb. 2003
  - Technology considered a hydropower project
  - Located in navigable waters



- Pacific Gas and Electric Company
  - Humboldt and Mendocino Projects, CA
  - Rehearing on P-12781 and P-12779, issued Oct. 2008
  - Affirms jurisdiction based on project location on navigable waters
- FERC has no authority to site wind energy projects

Marine and Hydrokinetic Project Definition

Generate electricity from waves or directly from the flow of water in ocean currents, tides, or inland waterways without the need for a dam.



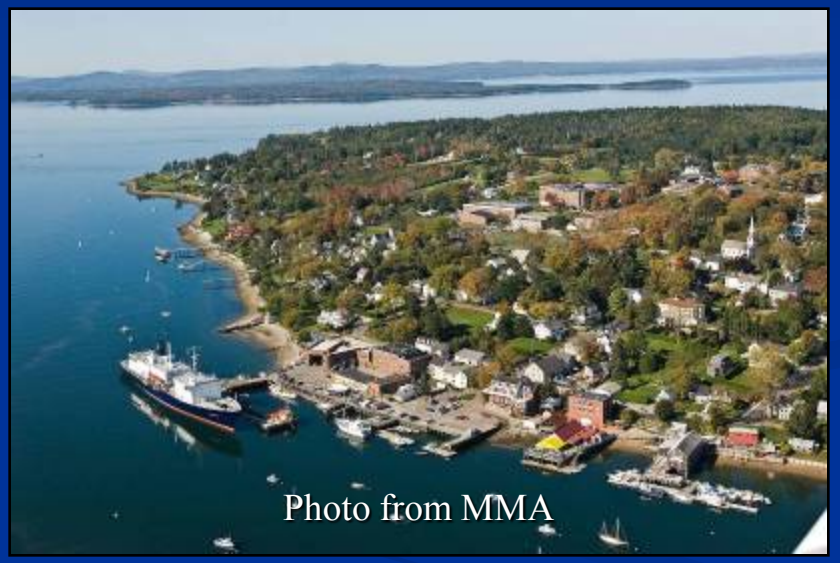
Types of Authorizations

- Preliminary permit – gives priority of application while studying project (3 years)
- Device testing – to test technology and gain site-specific experience and data without grid connection (short term)
- Pilot project license – to test technology and gain site-specific experience and data with grid connection (5 – 10 years)
- Commercial license – to construct and operate a project (up to 50 years)

Device Testing
(no FERC license)

Verdant Power, LLC
April 2005

Maine Maritime Academy
March 2010



- **Short term deployment for purpose of preparing a license application or for educational purposes**
- **No grid connection**
- **Experimental technology**

Pilot Project License

- To test technology and site for small, short term, removable projects with grid connection
- Less information on known effects; emphasis on post-license monitoring
- Protect the environment
  - Post-license monitoring
  - Project shutdown or removal if harm
- Process license applications in as few as 6 months

Commercial Project License

- Integrated Licensing Process (ILP)-default
  - Traditional Licensing Process (TLP)
  - Alternative Licensing Process (ALP)

Prefiling	Postfiling
• Applicant files initial proposal • Applicant consults with all • FERC scoping meetings • Study plan developed • Applicant conducts studies • Applicant prepares license application	• Applicant files application • FERC review • Agency/public comments • FERC prepares EA or EIS and seek comments • FERC action based on record

Hydropower Licensing Standard

Federal Power Act – FERC licenses must:

- Give equal consideration to power and environmental uses within waters of the U.S.
- Authorize projects that best serve the public interest




Shared Decision Making

U.S. Fish & Wildlife Service

-Endangered Species Act

-Migratory Bird Treaty Act

NOAA

-Essential Fish Habitat

-Marine Mammal Protection Act

-Endangered Species Act

States

-Coastal Zone Management Act

-Clean Water Act

-National Historic Preservation Act

U.S. Coast Guard

-Ports and Waterways Safety Act

BOEM

-Outer Continental Shelf Lands Act

Marine & Hydrokinetic Projects

(as of June 19, 2014)

Issued preliminary permits: 6 (108 MW)
- 2 tidal, 1 wave, 3 inland

Pending preliminary permits: 16 (3,941 MW)
- 2 tidal, 5 wave, 6 inland

Projects in pre-filing and having completed pre-filing for license: 3 (25.1 MW)
- P-12665 New York East River (NY) Tidal Pilot 0.2 MW
- P-13015 Muskeget Channel (MA) Tidal Pilot 4.9 MW
- P-14616 Pacific Marine Energy Test Center South Energy Test Site (OR, Outer Continental Shelf) Wave Test Center 20 MW

Projects in post-filing for license: None

License issued: P-12713 Reedsport OPT Wave Park (OR) Wave Commercial 1.5 MW

Licenses issued for pilot projects: 4 (2.45 MW)
- P-12611 Roosevelt Island (NY) Tidal Pilot 1.05 MW
- P-12690 Admiralty Inlet (WA) Tidal Pilot 1.0 MW
- P-12711 Cobscook Bay (ME) Tidal Pilot 0.3 MW
- P-13305 Whitestone Poncelet (AK) In-River Pilot 0.1 MW

DOI/FERC MOU

Signed April 9, 2009

- Clarifies jurisdiction on OCS
- Provides cohesive, streamlined process
- Encourages development of wind, solar, and hydrokinetic energy projects in an environmentally sensitive manner
- MMS has jurisdiction for non-hydrokinetic renewable energy projects
- For hydrokinetic:
  - MMS issues leases, easements, ROW
  - FERC issues licenses

BOEM/FERC Joint Guidance for OCS (July 19, 2012)

- Procedures for Obtaining a Lease and License
- Municipalities and Competition
- Lease and License Terms
- Financial Assurance Requirements
- Fee Structures
- Hybrid Project Considerations
- Straddle Project Considerations
- Contact Information

BOEM
Bureau of Ocean Energy Management

FERC
Federal Energy Regulatory Commission

BOEM/FERC Joint Guidance for OCS (July 19, 2012)

Key areas of intersection:

- Joint NEPA for non-competitive leases
- If competitive process, FERC begins licensing after BOEM lease issued
- Possibility of combining FERC pilot license with BOEM limited or research lease
- Possibility of departure from SAP requirement if no bottom-founded facilities

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Term of Lease and License
(goal is to align)

	BOEM	FERC
Commercial Lease/License	25 years	Up to 50 years – Original 30-50 years – Relicense
Limited Lease/Pilot License	5 years	About 5 years
Research Lease	Negotiated	

BOEM/FERC Cooperation

- Proposed Wave Energy Test Center on OCS off Newport, OR
- Pacific Marine Energy Center – South Energy Test Site (PMEC-SETS)
- Oregon State University – Northwest National Marine Renewable Energy Center
- Four berths, 10 devices, 10 MW, grid connected
- June 2013 – Unsolicited lease request submitted to BOEM

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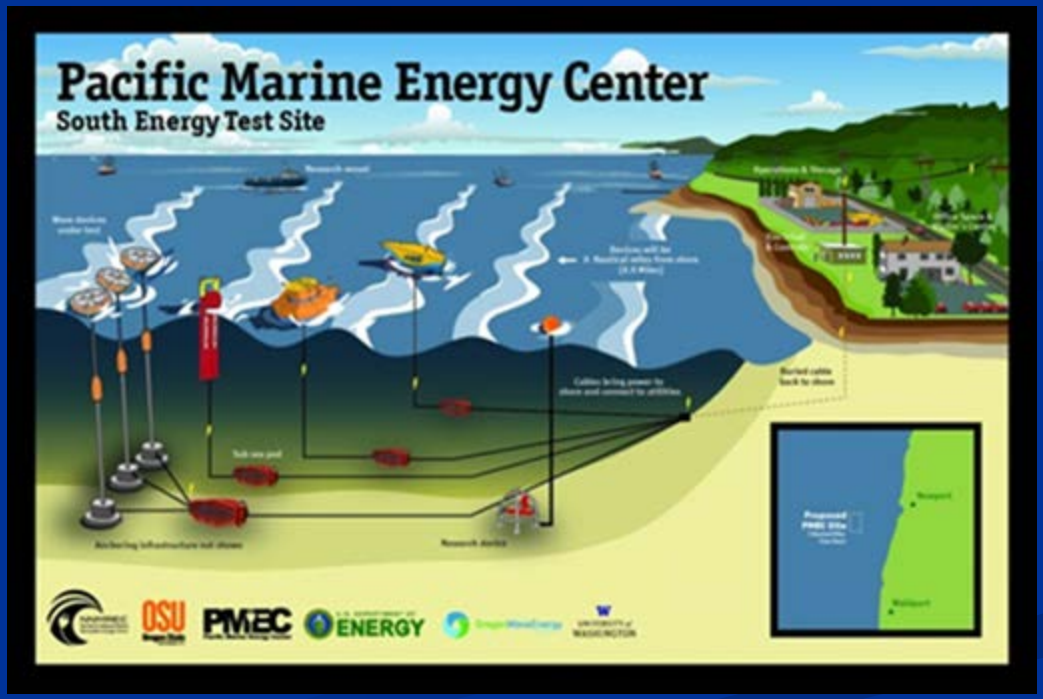
Pacific Marine Energy Test Center

- 5 miles off Oregon coast under FERC/BOEM joint review
- 4 wave test berths for 3 single devices and an array (up to 20 devices total)
- To be grid connected
- BOEM lease process and FERC license pre-filing coordinated and underway



Thank You

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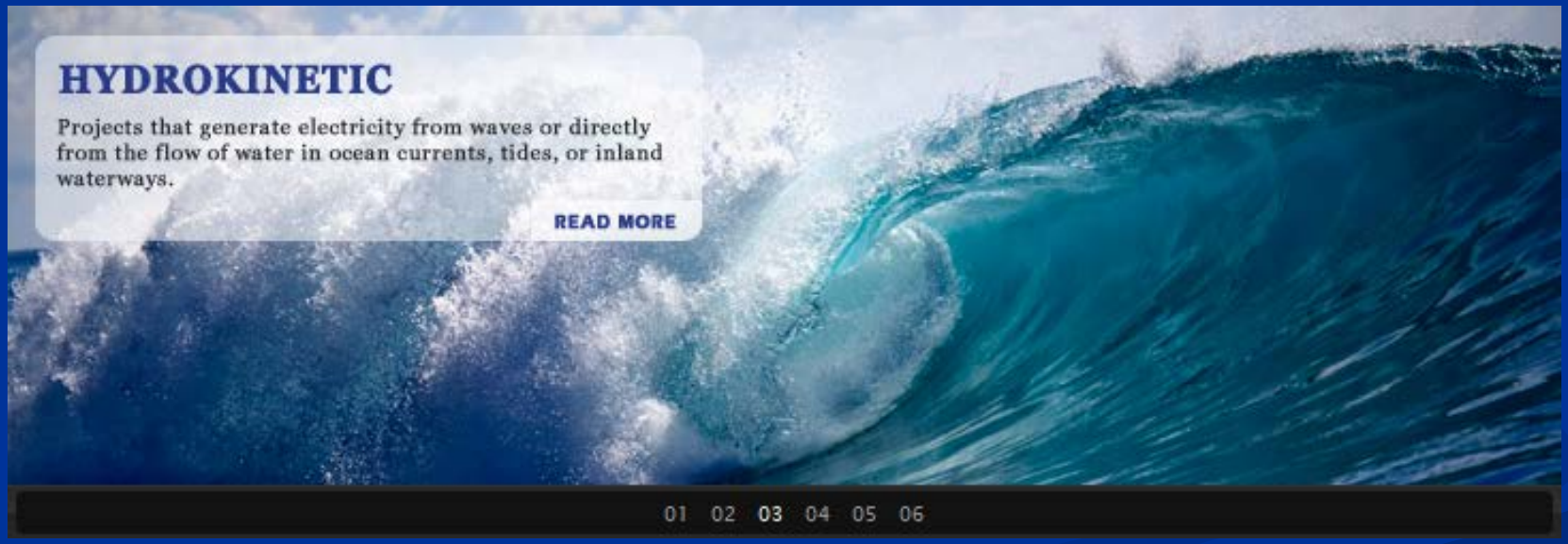

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