# Appendix A: Scoping Documents

# Notice of Scoping Letter

**Department of Energy**
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

April 27, 2010

TO: Distribution List

SUBJECT: Notice of Scoping – Northwest National Marine Renewable Energy Center/Oregon State University
Mobile Ocean Energy Test Berth Project
Newport, Oregon

The U.S. Department of Energy (DOE) is proposing to provide funding to the Northwest National Marine Renewable Energy Center (NNMREC)/Oregon State University (OSU), in Corvallis, Oregon for their proposed project to construct and operate a wave energy test facility, known as the "Mobile Ocean Test Berth" (MOTB). Pursuant to the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021), DOE is preparing a draft Environmental Assessment (EA) to:

- Identify any adverse environmental effects that cannot be avoided should this proposed action be implemented.
- Evaluate viable alternatives to the proposed action, including a no action alternative.
- Describe the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity.
- Characterize any irreversible and irretrievable commitments of resources that would be involved should this proposed action be implemented.

**Project Location and Proposed Action**

NNMREC/OSU has proposed to construct, deploy, and operate up to two MOTBs off the Oregon coast, approximately 2.0 miles off the coast of the city of Newport, Oregon. Each MOTB would be connected to a Wave Energy Conversion (WEC) device under test. An Underwater Sub-station Pod (USP) may also be included in the overall design and would serve to connect the

MOTB/WEC Devices. The MOTBs, WEC devices, and USP are referred to as the "proposed project."

The MOTBs would be operated within a one square-mile section of the Project Area shown in Figure 1. The Project Area would consist of a six square mile area, measuring 2 miles from east to west and 3 miles from north to south[1]. The MOTBs would serve as an integrated, standardized test facility for U.S. and international developers of wave energy, provide the critical infrastructure required to test and validate WEC devices, and allow developers to demonstrate the commercial viability of their technology. The MOTBs would provide WEC device developers with a resource to perform ocean testing of subscale and full-scale devices. The MOTBs would not be connected to the electrical grid on land, but instead would dissipate the energy generated by the testing of WEC devices through resistor load banks.

Each MOTB consists of a Power Analysis/Data Acquisition (PADA) device and an Adjustable Load Bank (ALB) contained on a standalone vessel on the order of 30- to 40–feet long. The MOTB hull design is based on the evaluation and analysis of ABS-approved materials and shapes. The design uses a composite hull with a boat shape, similar to the proven Navy Oceanographic Meteorological Automatic Device (NOMAD) style buoy used in the United States and Canada. The mooring system for each MOTB would consist of up to three anchors. The anchors would be either standard Danforth anchors or dead-weight anchors.

The PADA measures the WEC device's output voltage and current with respect to time at high sampling rates. The ALB dissipates the power generated from the WEC device. The NEPA analysis will also consider the use of an USP which would enable the power take-off cables from multiple test berth modules or WEC devices to be connected, and would enable the power to be delivered back to shore via a single subsea cable in future applications. The USP would either sit on the ocean bottom or float on the surface, depending on design specifics.

A variety of WEC devices could be tested with the MOTBs, but designs currently contemplated for testing fall into the general category of "point absorbers" or "oscillating water column" devices that can operate in the range of 150 feet of water." Each WEC device to be tested would include the device itself and a mooring system consisting of up to three anchors of variable configuration.

---

[1] GPS coordinates for the corners of the Project area: NW = 44.697764, 124.148319; NE = 44.699034, 124.108056; SW = 44.65403, 124.145677; SE = 44.655299, 124.105439.

To support the MOTBs, associated monitoring equipment would also be deployed. This equipment may include Acoustic Wave and Current Profilers (AWAC), Acoustic Doppler Current Profilers (ADCP), Waveriders, acoustic hydrophones, plankton collection plates, water quality monitoring devices (dissolved oxygen, temperature, salinity, etc.), fish tag receivers, electromagnetic frequency monitoring equipment, etc.

The MOTBs and future Underwater Sub-station Pod would be designed for a maximum uninterrupted service life of 12 months.

**Development of a Reasonable Range of Alternatives**

DOE is required to consider a reasonable range of alternatives to the proposed action during the environmental review. The definition of alternatives is governed by the "rule of reason." An EA must consider a reasonable range of options that could accomplish the agency's purpose and need and reduce environmental effects.

The proposed action consists of DOE's decision to provide funding for the proposed project. NNMREC/OSU would reduce environmental effects through "applicant committed measures" incorporated into the proposed action. The no action alternative will also be addressed.

**Probable Environmental Effects/Issues Scoped for the Environmental Analysis (EA)**

The EA will address direct, indirect, and cumulative impacts of the proposed action, as well as the no action alternative. The EA will describe the potentially affected environment and the impacts that may result to:

- Air Quality/Meteorology
- Biological Resources
    - Benthic Habitat
    - Marine Vegetation and Algae
    - Plankton
    - Invertebrates
    - Fish and Reptiles
    - Marine Mammals
    - Birds
    - State Special-Status Aquatic Species
    - Threatened and Endangered Species

    - Essential Fish Habitat.
- Water Resources
    - Water Quality
    - Wave Characteristics
    - Wind and Current
- Aesthetics
- Cultural Resources
- Energy
- Marine Navigation
- Noise and Vibration
- Socioeconomics
- Recreational Resources

**Public Scoping**

This letter will be available to all interested state, local, and federal agencies to supply input on issues to be discussed in the EA. Agencies should identify the issues, within their statutory responsibilities, that should be considered in the EA. The general public and Native American Tribes are also invited to submit comments on the scope of the EA. As part of the process related to determining the scope of issues related to the Proposed Action, we request your comments or other information by May 28th, 2010. Please send your comments to:

**Department of Energy**
**Golden Field Office**
**c/o Laura Margason**
**1617 Cole Boulevard**
**Golden, CO 80401**

Or via email to: **laura.margason@go.doe.gov**

**Public Scoping Meeting**

DOE also invites all interested state, local, and federal agencies, Native American Tribes, and the general public to participate in a public scoping meeting to learn more about the project and provide comments. This meeting will be held in the **Hennings Auditorium at Hatfield Marine Science Center from 6:30pm - 8:30pm on Wednesday, May 5th at 2030 SE Marine Science Dr. Newport, OR 97365.**

This letter and the draft EA, when available, will be posted to the Golden Field Office electronic reading room for further reference:

http://www.eere.energy.gov/golden/reading_room.aspx.

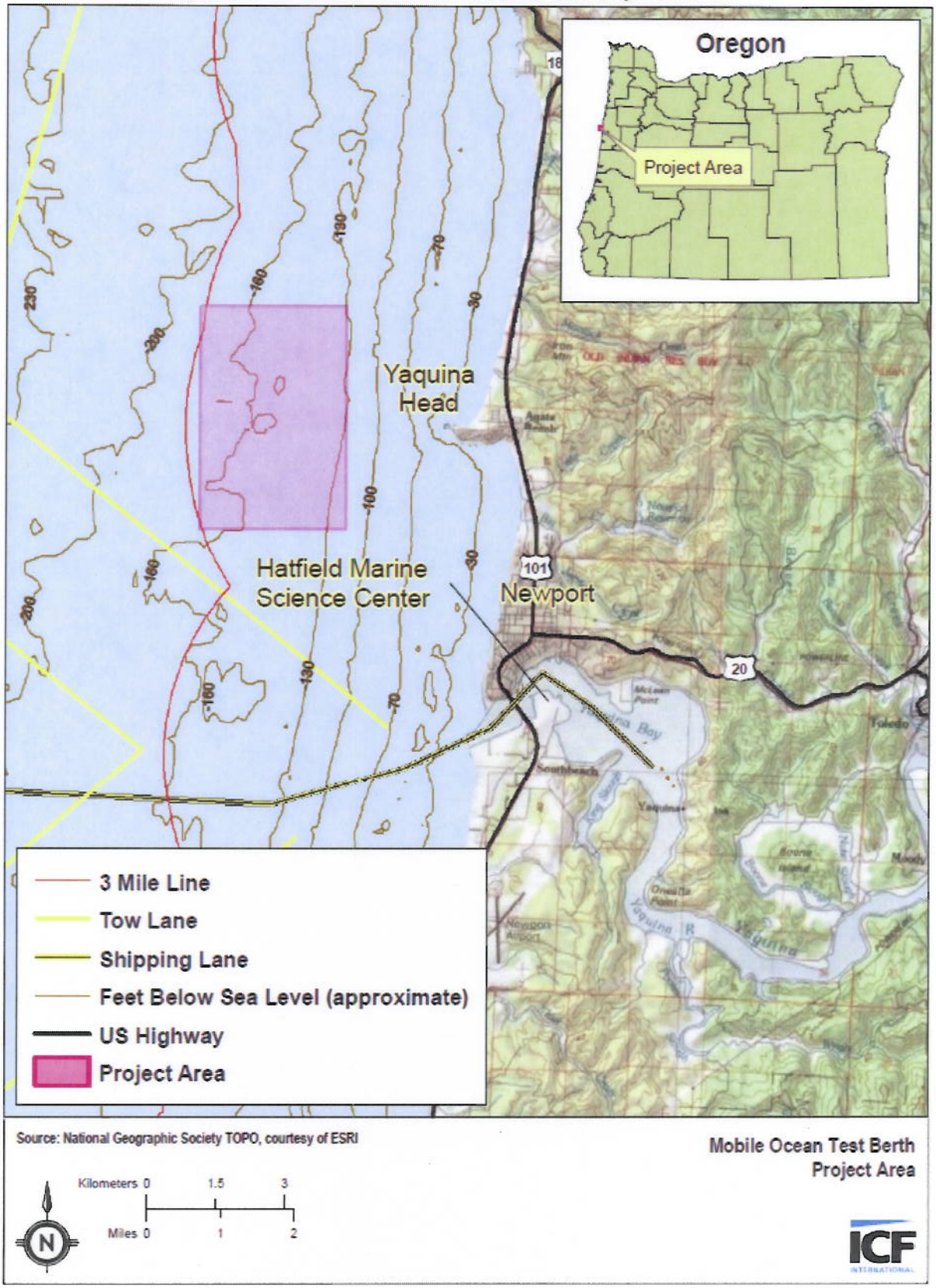
Thank you for your participation in the NEPA process.

Sincerely,

Steve Blazek
NEPA Compliance Officer

Attachments:
Figure 1: Mobile Ocean Test Berth Project Area

**Figure 1 – Mobile Ocean Test Berth Project Area**



# Public Notices

# NOTICE OF SCOPING

The U.S. Department of Energy (DOE) is requesting public input on the scope of environmental issues and alternatives to be addressed in the:

**Environmental Assessment**
**Mobile Ocean Energy Test Berth Project**
**Northwest National Marine Renewable Energy Center/OSU**
**Newport, Oregon**

Northwest National Marine Renewable Energy Center at Oregon State University is proposing to use funding from DOE to construct and operate a wave energy test facility, known as the "Mobile Ocean Test Berth". An Environmental Assessment (EA) will be prepared by DOE pursuant to the requirements of the National Environmental Policy Act (NEPA). The notice of scoping, description of the proposed project is available for review at the DOE Electronic Public Reading Room at

**http://www.eere.energy.gov/golden/Reading_Room.aspx**.

A public scoping meeting will be held on May 5, 2010 at Hennings Auditorium at Hatfield Marine Science Center from 6:30pm - 8:30pm located at 2030 SE Marine Science Dr Newport, OR 97365.

Public comments on the NEPA process, proposed action and alternatives, and environmental issues will be accepted until **May 28, 2010**.Please send comments to
Laura Margason, Department of Energy's Golden Field Office, 1617 Cole Blvd, Golden, CO 80401 or by email to laura.margason@go.doe.gov.

# PUBLIC NOTICES

CLASSIFICATION 8

**Public Notices 8**

METRO

**METRO COUNCIL WORK SESSION**
1:00 pm, Tues. May 4, 2010

**METRO COUNCIL MEETING**
5:00 pm, Thurs. May 6, 2010

Meetings are in the council chamber at Metro Regional Center, 600 NE Grand Ave., Portland, unless otherwise noted.
Please view agendas online at:
**www.oregonmetro.gov.**

You're invited at 6 p.m. the first Wed. of each month to the Metro Committee for Citizen Involvement. Information: 503-797-1539



**Public Notices 8**

REQUEST FOR COMMENTS
A 120-foot FCC licensed wireless communication tower is to be constructed at 2660 NW Division St., Gresham, Oregon. The FCC is seeking public comment on the proposed project as part of the review process by the Oregon State Historic Preservation Office. Please respond within 30 days of this publication to: Adapt Engineering Inc., 10725 SW Barbur Blvd., Suite 350, Portland, OR 97219 Attn: Bella Vista

**PUBLIC STORAGE AUCTION**
**PORTLAND SELF STORAGE**
**5803 SE 122nd St, 503-761-2843**
**May 7, 2010 at 11:30am**
#4072 Mary Couch



## NOTICE OF SCOPING

The U.S. Department of Energy (DOE) is requesting public input on the scope of environmental issues and alternatives to be addressed in the:

**Environmental Assessment Mobile Ocean Energy Test Berth Project, Northwest National Marine Renewable Energy Center/OSU Newport, Oregon.**

The Northwest National Marine Renewable Energy Center at Oregon State University is proposing to use funding from DOE to construct and operate a wave energy test facility, known as the "Mobile Ocean Test Berth". An Environmental Assessment (EA) will be prepared by DOE pursuant to the requirements of the National Environmental Policy Act (NEPA). The notice of scoping, description of the proposed project is available for review at the DOE Electronic Public Reading Room at:
**http://www.eere.energy.gov/golden/Reading_Room.aspx.**

A public scoping meeting will be held on May 5, 2010 at Hennings Auditorium at Hatfield Marine Science Center from 6:30pm - 8:30pm located at 2030 SE Marine Science Dr Newport, OR 97365.

The purpose of the meeting is to: 1) Inform the public about the project, 2) provide an overview of the DOE NEPA process, and 3) obtain feedback on what impacts should be considered by the NEPA process for the project.

Public comments on the NEPA process, proposed action and alternatives, and environmental issues will be accepted until May 28, 2010. Please send comments to:

Laura Margason, Department of Energy's Golden Field Office, 1617 Cole Blvd, Golden, CO 80401
or by email to laura.margason@go.doe.gov.

# PUBLIC NOTICES

**LEGAL DEADLINES:**

**WEDNESDAY EDITION: 5:00pm Thursday**
**FRIDAY EDITION: 12:00pm Tuesday**

### NOTICE

Siletz Fire Protection District is selling the following surplus vehicles by sealed bid with no minimum bid required.' Bids must be received by Friday May 7, 2010 to the Siletz Fire Protection District, P. O. Box 380, Siletz, OR 97380, or delivered to the fire station in Siletz by 4:00 pm that day. The bid must include your name, address, phone number and what truck you are bidding on. Bids must be in a sealed envelope with which vehicle the bid is for on the outside of the envelope. Separate bids must be made for each vehicle. Payment must be made in full with possession of vehicle. If the highest bidder does not claim the vehicle within 10 days (May 20, 2010), then the second highest bidder will be contacted, and on down until the vehicle is sold. Bids will be opened at the Fire Department Board of Directors meeting on Monday, May 10, 2010 at 7:30 pm. All bidders are welcome to attend. 1994 Chevrolet Suburban 1500: It does not run, has good tires and new brakes, sold "AS IS." 1981 Ford 750 diesel truck with 1800 gallon steel water tank plumbed for pump. Pump is NOT included, new batteries, sold "AS IS." 1979 Ford C8000 diesel fire truck: Truck runs, pump does not work. 750 gallon steel water tank, tires have less than 500 miles on them, new batteries, sold "AS IS." The Siletz Fire Protection District reserves the right to reject any and all bids. A-28, 30, M-5, 7 (95-07)

### NOTICE OF SCOPING

The U.S. Department of Energy (DOE) is requesting public input on the scope of environmental issues and alternatives to be addressed in the: Environmental Assessment Mobile Ocean Energy Test Berth Project, Northwest National Marine Renewable Energy Center/ OSU Newport, Oregon. The Northwest National Marine Renewable Energy Center at Oregon State University is proposing to use funding from DOE to construct and operate a wave energy test facility, known as the "Mobile Ocean Test Berth". An Environmental Assessment (EA) will be prepared by DOE pursuant to the requirements of the National Environmental Policy Act (NEPA). The notice of scoping, description of the proposed project is available for review at the DOE Electronic Public Reading Room at: www.eere.energy.gov/golden/Reading_Room.aspx. A public scoping meeting will be held on May 5, 2010 at Hennings Auditorium at Hatfield Marine Science Center from 6:30pm - 8:30pm located at 2030 SE Marine Science Dr Newport, OR 97365. The purpose of the meeting is to: 1) Inform the public about the project, 2) provide an overview of the DOE NEPA process, and 3) obtain feedback on what impacts should be considered by the NEPA process for the project. Public comments on the NEPA process, proposed action and alternatives, and environmental issues will be accepted until May 28, 2010. Please send comments to Laura Margason, Department of Energy's Golden Field Office, 1617 Cole Blvd, Golden, CO 80401 or by email to laura.margason@go.doe.gov. A-30, M-5 (17-05)

### NOTICE OF BUDGET COMMITTEE MEETING

A public meeting of the Budget Committee of the Linn Benton Lincoln ESD, Linn County, State of Oregon, to discuss the fiscal year July 1, 2010 to June 30, 2011, will be held at 905 4th Avenue SE Albany, Oregon. The meeting will take place on the 12th day of May, 2010 at 6:00 P.M. The purpose of the meeting is to receive the budget message and to receive comment from the public on the budget. A copy of the budget document may be inspected or obtained on or after May 12, 2010 at 905 4th Avenue SE, Albany, Oregon 97321, between the hours of 8:00 A.M. and 5:00 P.M. This is a public meeting where deliberation of the budget committee will take place. Any person may appear at the meeting and discuss the proposed programs with the Budget Committee. A-16, M-5 (65-05)

### CITY OF TOLEDO NOTICE OF BUDGET COMMITTEE MEETING

A public meeting of the Budget Committee of the City of Toledo, Lincoln County, State of Oregon, to discuss the budget for the fiscal year July 1, 2010, to June 30, 2011, including the expenditure of State revenue sharing funds, will be held at Toledo City Hall, Council Chambers, 206 N. Main Street. The meeting will take place on Monday, May 17h, 2010, at 5:30 p.m. The purpose of the meeting is to receive the budget message and to receive comment from the public on the budget. A copy of the budget document may be inspected or obtained on or after May 11th at City Hall, between the hours of 8 a.m. and 5 p.m. This is a public meeting where deliberation of the Budget Committee will take place. Any person may appear at the meeting and discuss the proposed programs with the Budget Committee. The Toledo City Hall Council Chambers is handicapped accessible. Please contact the City Recorder if you will need other assistance. /s/ Michelle Amberg, Budget Officer. PUBLISH: NEWS-TIMES, April 23rd & May 5th, 2010 (93-05)

### TRUSTEE'S NOTICE OF SALE

Loan No.: 1117010556 T.S. No.: 7100378 Reference is made to that certain deed made by Jeffery D. McNelly and Diana K. Thomas, not as tenants in common, but with the Right of Survivorship as Grantor to Pacific Northwest Company of Oregon, Inc., as Trustee, in favor of Mortgage Electronic Registration Systems, Inc. as Beneficiary, dated 12/13/2006, recorded 12/19/2006, in the official records of Lincoln County, Oregon in book/reel/volume No. xx at page No. xx, fee/file/instrument/microfilm/reception No. 200619173 covering the following described real property situated in said County and State, to wit: Real property in the County of Lincoln, State of Oregon, described as follows: That portion of the Northeast 1/4 of the Northwest 1/4 of Section 33, Township 6 South, Range 10 West, Willamette Meridian, in Lincoln County, Oregon, described as follows: Beginning 480 feet West of the Southeast corner of the Northeast quarter of the Northwest quarter in Section 33 above described; thence North 660 feet; thence West 330 feet; thence South 660 feet; thence East 330 feet to the point of

# Scoping Responses

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Oregon Fish and Wildlife Office
2600 SE 98th Avenue, Suite 100
Portland, Oregon 97266
Phone: (503) 231-6179 FAX: (503) 231-6195

Reply To: 7971.0081
File Name: OSU Wave Energy Test Project
TAILS: 13420-2010-CPA-0112
TS Number: 10-940
DOC Type: Comment

MAY 27 2010

Laura Margason
Department of Energy
Golden Field Office
1607 Cole Boulevard
Golden, CO 80401

Subject: Oregon Fish and Wildlife Office comments on Notice of Scoping for the Northwest National Marine Renewable Energy/Oregon State University Mobile Ocean Energy Test Berth Project

The Fish and Wildlife Service's Oregon Fish and Wildlife Office (OFWO) has reviewed the Department of Energy's (DOE) April 27, 2010 "Notice of Scoping for the Northwest National Marine Renewable Energy/Oregon State University Mobile Ocean Energy Test Berth Project" regarding the proposal to provide funding to the Northwest National Marine Renewable Energy (NNMREC)/Oregon State University (OSU) in Corvallis, Oregon for their proposed project to operate a wave energy test facility, known as the "Mobile Ocean Energy Test Berth" (MOTB).

We submit the following comments and recommendations under the authority of the National Environmental Policy Act (42 U.S.C. § 4321 *et seq.*), the Migratory Bird Treaty Act, as amended (MBTA; 16 U.S.C. § 703), the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. § 1531 *et seq.*), the Fish and Wildlife Coordination Act (48 Stat. 401), as amended (16 U.S.C. § 661 *et seq.*), and the Federal Power Act (16 U.S.C. § 791a, *et seq.*).

## SPECIFIC COMMENTS

### Project Description

NNMREC/OSU has proposed to construct, deploy and operate up to two MOTBs, approximately 2.0 miles off of the coast near the city of Newport, OR. Each MOTB consists of a Power Analysis/Data Acquisition device and an Adjustable Load Bank contained on a stand alone vessel approximately 30 to 40 feet long, along with associated monitoring equipment. Each MOTB would be connected to a Wave Energy Conversion (WEC) device under test, and both the MOTB and the WEC would be independently moored to the ocean floor by up to three

anchors. An underwater substation pod (USP) may also be included in the project and would connect multiple MOTB/WEC sets with each other. This pod would either sit on the ocean bottom or float on the surface, depending on design specifics. A variety of WEC devices could be tested with the MOTBs. The MOTBs and USP would be designed for a maximum uninterrupted service life of 12 months.

**Fish and Wildlife Resources**

As part of the environmental analysis required for this process, we encourage the DOE to consider the effects of this project on several fish and wildlife resources of special interest to the OFWO. Species to consider include (but are not limited to) the ESA listed marbled murrelet (*Brachyramphys marmoratus*) and short-tailed albatross (*Phoebastria* (=Diomedea) *albatrus*), as well as the recently delisted brown pelican (*Pelicanus occidentalis*) and northern bald eagle (*Haliaeetus leucocephalus*). Potential adverse impacts and concerns from development and operation of wave energy test facilities include, but are not limited to, wildlife entrapment or direct mortality, and disruption or impairment of essential behavior patterns.

**Recommendations**

1. Marbled murrelet, a threatened species, nest in older forests near the ocean off the California, Oregon, and Washington coasts. Murrelets are currently in decline. Murrelets forage just offshore in the water column, and depend on these foraging sites year round. Much is still not known about their feeding behavior although it is thought they forage in exclusive areas in proximity to their nest sites during the nesting season (www.reo.gov/monitoring/10yr-report/marbled-murrelet/final-report.html). Wave energy MOTB construction and operation needs to insure that foraging areas for this species are not disrupted and direct mortality is avoided.

   Note: If the DOE, based on a Biological Assessment or evaluation, determines that the marbled murrelet or any other threatened and endangered species and/or critical habitat may be affected by activities authorized by the requested preliminary permit, we recommend that the DOE consult with the OFWO following the requirements of 50 CFR 402 which implements the ESA.

2. The Fish and Wildlife Service administers the rocks, reefs and islands along the Oregon coast, including those in Lincoln County, as part of Oregon Islands National Wildlife Refuges and Wilderness. Project design, construction and operation should incorporate measures that prevent direct impacts to the Refuge and indirect impacts (disturbance) to the seabird and pinniped populations using the Refuge. The most effective avoidance measure for any project of this type is to maintain maximal distance away from any rocks, reefs, and islands.

3. Oregon's near shore (Territorial Sea) waters serve as a foraging area for migratory seabirds that nest on the Refuge. In addition, these waters also serve as a major migration corridor for millions of seabirds, waterfowl, shorebirds and waterbirds annually. Much of this migration occurs at low altitude, just above the surface of the sea, therefore, wave energy MOTBs design, construction, and operation needs to insure that migration routes

are not disrupted and direct mortality (collision with above water surface project features) is minimized.

4. The gray whale (*Eschrichtius robustus*) is a coastal whale that may also frequent the coastline of Lincoln County. Gray whale pods and individuals may be seen off the Oregon coast at any time. The gray whale feeds in shallow water near shore during summer and fall, migrates in deeper water to the south for breeding and calving during the winter, and migrates north in the spring. Southbound pods pass the Oregon coast from December through early February. Northbound pods pass in late February through early June. Wave energy MOTB design, construction and operation needs to insure that gray whale migration routes and feeding areas are not disrupted.

## SUMMARY COMMENTS

While the OFWO is supportive of the testing and development of environmentally-sound, alternative energy technologies, the aforementioned environmental issues should be addressed during the NEPA process to prevent unnecessary delays in this test project. If you have any questions regarding these comments please contact Ann Gray or Doug Young of my staff at 503-231-6179.

Sincerely,

Paul Henson, PhD
FOR State Supervisor

cc:
Mead, USFWS
Sleeger, DOI
Enright, ODOE

May 28, 2010

Department of Energy
Golden Field Office
C/o Laura Margason
1617 Cole Boulevard
Golden, CO 80401

Re: Comments on Department of Energy's Scoping of the Northwest National Marine Renewable Energy Center/Oregon State University Proposed "Mobile Ocean Test Berth" Wave Energy Test Facility

Dear Ms. Margason,

Pursuant to 18 CFR 5.4(d)(2)(iv), the Oregon Chapters of the Surfrider Foundation (Surfrider) submit these comments on the proposed "Mobile Ocean Test Berth" Wave Energy Test Facility (Mobile Ocean Test Berth or MOTB). Surfrider appreciates the interest of the Department of Energy (DoE) and the Northwest National Marine Renewable Energy Center/Oregon State University (NNMREC/OSU) in substantively addressing potential environmental, recreational, and other impacts of the proposed MOTB. Listed below are Surfrider's comments regarding: 1) the proposed size and location of the MOTB, 2) the MOTB's environmental impacts, such as electromagnetic field generation, marine mammal entanglement, and habitat disturbance, 3) DoE and NNMREC/OSU's recognition of Oregon's coastal recreational community and interests as stakeholders, and 4) its support of incorporating and employing adaptive management and robust in-situ monitoring throughout the process.

<u>Comment One: The Proposed Size and Location of the MOTB and its potential affect on wave dynamics:</u>

The proposed MOTB will be located in the State's territorial waters, within the three nautical mile jurisdictional boundary, bordering the federal jurisdictional waters. The project elements sit directly in the Pacific Ocean, adjacent to an area with a number of high quality surf breaks that attract a large number of year-round recreational uses. The area's characteristics are attributable to the unique coastal topography, prevailing wind direction, currents, and resulting sand accretions. Every effort should be made to anticipate and consider the effects of the MOTB on these characteristics and the environmental factors that create and perpetuate them. Additionally, every effort should be made to preserve the area's value as a coastal recreation destination.

Even very minute alterations in substrate composition and character can have dramatic effects on wave characteristics. The proposed MOTB's impact, even if limited through careful site selection and mitigation, could result in permanent dramatic effects on the site's unique wave character and the recreational resource it

represents. Therefore, Surfrider requests that the particular location, configuration, and substrate characteristics and movement, which contribute to the proposed site's unique characteristics be given due consideration with non-consumptive coastal recreation in mind. Please do not give short shrift to the complex confluence of environmental conditions that make the proposed project site such a unique recreational resource for the region's surfing community.

Surfrider has determined that wave height reduction associated with hydrokinteic energy development and generation correlates with a project's reduced distance from the shoreline. Surfrider requests the project proponents give the myriad aspects making up the site's unique wave character great consideration, and study the proposed projects likely effects on wave quality. Moreover, Surfrider requests that all available measures be implemented to minimize sand substrate disturbance and wave energy attenuation to preserve the area's recreational resource in its current condition and quality.

Comment Two: The MOTB May Impact the Near-Shore Environment Through Electromagnetic Field Generation, Migration Corridor Overlap or Interference, and Substrate and Habitat Disturbance and Disruption:

The MOTB will likely affect the proposed project area's fish, crustacean, marine mammal, and other marine biotic resources through electromagnetic field generation, migration corridor overlap and interference, and habitat disturbance.

Hydrokinetic wave energy generation is known to emit electromagnetic fields (EMFs). Surfrider believes that shark behavioral response to these EMFs, and other wave energy operations, is an important public safety issue. Sharks detect and are adapted to respond to electric fields at low frequencies. They can detect a millivolt (1/1000 of a volt) at distances of up to 100 meters under water. Skate, ray, and shark species with heightened sensitivity to EMF may be located in or near the area affected by the proposed project. The Oregon coast provides habitat for as many as fifteen shark species, many of which commonly occupy near-shore areas. Past studies and anecdotal evidence indicate that aggressive shark species can be expected to be present in the vicinity of the project at various times of the year depending on the species' mating and migration patterns and environmental conditions. For example, Great White Sharks have been documented close to shore off the central Oregon coast. How these sharks may respond to EMF generated by a development like the MOTB is as-yet a largely unanswered question. There is a dearth of clear evidence indicating whether sharks will acclimate to, be attracted by, or be repulsed by EMF. While magnetic frequency ranges of wave and tidal energy technology may be outside the range of shark sensitivity, more research is required to assess behavioral impacts of EMFs on sharks and potential risks to surfers, swimmers, divers, windsurfers, and other in-the-water coastal recreationalists. Thus, DoE and NNMREC/OSU should consider generation of abnormal EMFs prior to implementation of the MOTB.

Also, as many as eleven cetacean species are known to navigate by echolocation in, through, or near the area affected by the proposed project. Of these species, gray whales and harbor porpoises are most likely to be found in the closest proximity to the project area. In addition to considering the effects of EMFs on these species, DoE and NNMREC/OSU should consider risks posed to whale migration from entanglement and/or collision into the MOTB mooring and transmission infrastructure.

Surfrider requests that DoE and NNMREC/OSU consider and incorporate all relevant studies of both EMF and entanglement risks to sharks, whales and other species, preferably from comparable study areas, into the MOTB development process. This should include assessments of the impacts posed by comparably moored projects beyond hydrokinetic developments.

Similarly, DoE and NNMREC/OSU should consider the effect of the MOTB's mooring equipment on other benthic species, and the environmental impacts of any proposed measures to keep the MOTB and its infrastructure free of accumulated biotic growth or debris.

Additionally, pre-development assessments should not preclude careful research and monitoring throughout the development and operation lifecycles of the MOTB. The weight of evidence regarding ecological safety is limited with respect to sharks, whales, and other local and migratory marine species. Wave energy is a nascent technology. Using existing limited data sets to speculate on the likelihood of potential impacts over time sets poor precedent for large-scale testing and development of renewable ocean energy. The Hawaii and Cape Wind assessments are helpful but certainly not exhaustive or comprehensive on this topic.

The recent Collaborative Offshore Wind Research into the Environment (COWRIE) reports include more extensive literature reviews and compilations regarding the effects of EMF. COWRIE asserts that a greater understanding of the environmental impact of EMF emissions is urgently required for offshore wind development, owing to the lack of current knowledge. COWRIE has identified a broad set of studies to investigate the potential effects of EMF. Surfrider recommends the project proponents consider and incorporate these studies.

Considering the variety of technologies likely to be used in association with the MOTB, Surfrider recommends that DoE and NNMREC/OSU consider monitoring and further quantification of frequencies and field levels of EMF as a necessary component of any permitting conditions for the proposed project. DoE and NNMREC/OSU should be required to focus research to monitor for attraction and other changes in faunal behavior. Fauna should not be limited to sharks. The NEPA process should give due consideration to impacts on other species similarly likely to be affected by EMF through identification of species of concern and development of a scientifically sound monitoring plan to assess impacts.

Surfrider recommends that the MOTB development and implementation process incorporate regular monitoring of the condition of the permanent infrastructure as well as any turbines, generators, and undersea cable, including ongoing monitoring of all elements for EMF. Such monitoring should include adaptive management mechanisms, such as triggers for corrective actions. Consideration should be given to any and all conditions under which the MOTB or its components could fail. Development conditions should establish contingencies for unexpected results or outcomes with respect to EMF and undersea cable. Careful consideration should be given to the COWRIE studies on EMF in developing monitoring and research programs for the MOTB. Draft monitoring and research plans should be available for public review throughout the process. Similarly, straightforward public access to monitoring results, such as through a project website, should be readily available.

Comment Three: Recognize and Involve Oregon's Coastal Recreation Community and Interests as Stakeholders and Thoroughly Consider Impacts On and To Them:

DoE's May 5th Community Scoping Meeting presentation mentioned DoE and NNMREC/OSU's intent to consider impacts to Oregon's coastal recreational community, as well as Oregon's coastal cultural and socioeconomic resources. Surfrider recommends that DoE and NNMREC/OSU take additional steps to actively involve Oregon's coastal recreational community as stakeholders and partners in the development of the MOTB. DoE and NNMREC/OSU should look to past efforts regarding licensing and permitting of wave energy development off of Coos Bay and Reedsport for resource materials and stakeholder analyses to supplement its own analysis. The Coos Bay Notice of Intent/Pre-Application Document (NOI/PAD) for the FERC Project No. 12749, the Coos Bay Ocean Power Technology (OPT) Wave Park, filed with FERC by the Oregon Wave Energy Partners I, LLC (OWEP) on March 7, 2008 provides an example of such analysis. Specifically, the Coos Bay NOI/PAD mentions the private developer's intent to implement an adaptive management plan for the Coos Bay OPT Wave Park. As with the similar Reedsport project, continued work with previously identified and engaged stakeholders will better facilitate identification of the DoE/NNMREC/OSU MOTB's potential impacts and alternatives.

Surfrider hopes that any forthcoming EA will give sufficiently thorough treatment to surfing and other near-shore water-based non-consumptive recreational pursuits, and adequately consider impacts thereon. Notably, while surfing does commonly occur near headlands, jetties, and the like, it is not uncommon for Oregon's surfers to recreate along open stretches of coastline in the shore break or at offshore breaks. The Yaquina Head area is home to a number of high quality and heavily utilized surf breaks. Surfrider requests that DoE and NNMREC/OSU give great consideration to the region's surfers and other members of the recreational community and their wave dependent and near-shore-based-recreation uses, including, but not limited to surfing, kayaking, boogie-boarding, skim-boarding, stand-up-paddling, surf-skiing, and body surfing. Such consideration should also be supplemented and enhanced by thorough consideration of commercial and

recreational fishing and crabbing, sightseeing, and other land-based recreational uses that may be impacted by a large near-shore development of this sort.

Comment Four: Employ Adaptive Management and Robust Monitoring Through All Phases of the MOTB's Permitting, Development, Installation, Use, and Future Decommissioning:

Finally, the need to employ adaptive management throughout this process cannot be over-emphasized. This is important to ensure that new information is applied to assess needs for modification, mitigation, and/or removal as conditions change and knowledge develops. Other projects being developed on the Oregon Coast may help aid in the understanding of the challenges that may be faced when deploying wave energy devices in Oregon's Territorial Sea. An example of this would be the sinking of the Finevera Buoy off of Yaquina Head in November of 2007. Unfortunately, this buoy wasn't removed from the seafloor until the summer of 2008 because an adequate emergency response plan was not in place at the time of sinking. There is no excuse for a similar event to occur with the MOTB. Similarly, DoE and NNMREC/OSU should consider and incorporate Oregon's ongoing efforts to revise and update its Territorial Sea Plan with regard to ocean-based hydrokinetic energy development and its impacts on other uses of Oregon's Territorial Sea.

Surfrider appreciates your timely consideration of these comments, requests and recommendations. Surfrider eagerly anticipates DoE's response to the foregoing, the forthcoming EA, and continued involvement in the permitting and development of the MOTB.

# FW Ocean Wave Energy Test Berth - Newport OR

-----Original Message-----
From: Yvonna Weiland [mailto:wldpt01@yahoo.com]
Sent: Wednesday, May 26, 2010 8:17 PM
To: Margason, Laura
Subject: Ocean Wave Energy Test Berth - Newport, OR

Dear Laura:

I attended the meeting held in Newport in early May. Thank you for the time and effort involved to bring this meeting to our community.

I would ask that careful consideration be made as to the location of the Test Berth. It is my understanding that currently you are looking at a site almost directly off shore from Yaquina Head. As you know, Yaquina Head and its lighthouse is one of the most popular tourist destinations on the central Oregon coast. I am concerned that a Test Berth would interfere with the view of the magnificant horizon from the lighthouse, and might negatively impact the revenue generated by Yaquina Head itself and the local hospitality businesses.

Perhaps a location to the south of the jetty would cause less of an impact to the tourist industry in and around Newport.

Thank you.

Yvonna Weiland

P.S. Please add me to your distribution list.

# Scoping Meeting Transcript

NEPA PUBLIC SCOPING MEETING

Northwest National Marine Renewable Energy Center/Oregon State University's Mobile Ocean Test Berth Deployment and Installation Environmental Assessment

At

Hatfield Marine Science Center

South Beach, Oregon

May 5, 2010

6:30 PM

Lee Blackwood
Blackwood Court Reporting
PO Box 536, Newport, Oregon 97365



APPEARANCES

| | |
|---|---|
| Meleah Ashford: | Program Manager<br>Northwest National Marine Renewable Energy Center<br>204 Rogers Hall<br>Corvallis, OR 97331-6001 |
| Laura Margason: | NEPA Specialist<br>U.S. Department of Energy<br>Golden Field Office |

| | | |
|---|---|---|
| | | 1617 Cole Boulevard |
| | | Golden, CO 80401-3393 |
| John P. Horst: | | Public Affairs Specialist |
| | | U.S. Department of Energy |
| | | Golden Field Office |
| | | 1617 Cole Boulevard |
| | | Golden, CO 80401-3393 |
| Tim Ramsey: | | Project Officer |
| | | U.S. Department of Energy |
| | | Golden Field Office |
| | | 1617 Cole Boulevard |
| | | Golden, CO 80401-3393 |

3

| | | |
|---|---|---|
| Christopher Moelter: | | Senior Associate |

| | |
|---|---|
| | ICF International |
| | 317 SW Alder Street, Ste. 800 |
| | Portland, OR 97204 |
| Kaety Hildenbrand: | Marine Fisheries Extension Faculty |
| | Oregon State University |
| | Lincoln County Extension Office |
| | 29 SE Second Street |
| | Newport, OR 97365 |

INDEX

5

May 5, 2010 - 6:35 PM

LAURA MARGASON: I think we will get started here. Welcome, everyone.

So I'd like to welcome everyone. This is a Department of Energy Scoping Meeting for, umm, the Environmental Assessment that is going to be conducted for the Northwest National Marine Energy, umm, Renewable Energy Center, part of OSU. And their project is the Mobile Ocean Test Berth.

I want to introduce myself. My name is Laura Margason. I'm a NEPA specialist with the Department of Energy. I'm based at the Golden Field Office in Golden, Colorado, and I'm going to be conducting a little bit of a NEPA overview and some explanation about our process and what we do.

I have Kaety Hildenbrand here. She is here to help

facilitate, and she is with OSU Sea Grant.

My coworker is here today. His name is Tim Ramsey.

He's going to get up and speak a little more about the

program and -- the Water Power Program and its purpose and

its mission.

We are going to have a brief question section right

after Tim's discussion where if you have any questions on

the NEPA process or the Water Program's mission, then that



will be an opportunity for you to ask a specific question

on the process at that point.

And, umm, then afterwards we will have Meleah

Ashford. She is with the National Marine Renewable --

Northwest National Renewable Energy Center, just to

clarify. It's kind of a mouthful, so we're

going to call

it NNMREC from here on out. But Meleah will get up and discuss a little bit more about NNMREC and give us an overview of the project itself.

Did you have anything to add?

KAETY HILDENBRAND: And then we will open it up for public comments. And a few of you did sign in that you wanted to comment. If you change your mind during this time, that's fine. We will start with people on the list, and then we will ask for any more.

And there's also public comment forms inside your envelope. You can either leave it here tonight, or the address is on there if you want to mail it to us.

LAURA MARGASON: Okay. Thank you, Kaety.

I'm going to dive in now to the NEPA process overview. This is pretty general, a very quick overview.

Some people may know more, some people may know very little about this process, so I thought I would just give us a brief overview to let you know how DOE is going to be conducting this process, and the purpose and why we are

7

here today.

So what is NEPA? For those who don't know, it stands for the National Environmental Policy Act. It was signed by President Nixon in 1969 and enacted as federal law effective in early 1970. It applies to federal agencies only. So sometimes we will get a state or someone in a private industry asking why, you know, do they have to do NEPA? And, really, it is no unless this is a federal action triggering the need for NEPA. It was one of the

first national charters for the protection of the environment.

And part of NEPA has a mandate that any environmental information that is collected during the NEPA process must be shared to any and all public officials and citizens prior to that NEPA decision being made.

So in order for NEPA to apply, there has to be some type of federal action. In this case the Department of Energy is proposing to fund the Northwest National Marine Renewable Energy Center, NNMREC, for their proposed project, which is to construct, deploy, and operate a wave energy test facility which they call the Mobile Ocean Test Berth. Funding underneath NEPA constitutes a federal NEPA action, so that is what triggers the need for NEPA compliance.

There are just some basic NEPA objectives. It is a

decision-making process. It helps the agency understand all the environmental consequences that could come about based on their proposed action. Umm, it helps implement and for the federal agencies to take actions in order to protect the shore and enhance the environment in which the proposed action will take place.

NEPA is supposed to focus truly on significant issues. This is important because a lot of people ask, you know, why aren't you looking at this topic? Why aren't you looking at this topic? It really is a concise and -- a concise document that wants to focus on significant issues and potentially significant impacts related to that proposed action, in this case the project.

And it's really there -- The NEPA process is there to promote an agency's decision making process and for better planning overall within that agency's programs.

UNIDENTIFIED PERSON: A quick question.

LAURA MARGASON: Yes.

UNIDENTIFIED PERSON: Who determines whether something is potentially significant or not? That's kind of subjective.

LAURA MARGASON: It is. It is very subjective, and, you know, case law has helped dictate specifically what is deemed significant. A lot of times with DOE's decision making process we're going to rely on various



agencies to help us figure out what is significant. We are going to work with local and state -- federal and state

level agencies in order to help us understand. You know, we are not biologists, so we are going to work with them in order to have them provide expertise in what is significant and what isn't.

We also have a third party consultant that has been hired to write our document. They are, you know, experts in their field of compiling documents, compiling information, and conducting analyses, but in the end the decision is still up to the DOE officials. But there is a lot that goes into making that final decision. Does that answer your question?

UNIDENTIFIED PERSON: Yes, it does.

LAURA MARGASON: Okay. So we will make the determination to do an environmental assessment for this project. An EA is basically an analysis of a potential impact that may occur from your actions on the

human and

19 the natural environment. Umm, and I'll often refer to it

20 as a proposed action, but in this specific instance we are

21 talking about the construction and deployment of the -- and

22 the operation of the Mobile Ocean Test Berth.

23 Umm, part of the EA describes the purpose and need

24 for this proposed action, and so that is a chapter in

25 itself; just on why we are doing it, and the purpose of the

10

1 project. And it's going to identify all the potential

2 impact and any mitigation that needs to go along with

3 those. So part of that is identifying any significant

4 impact that is applying mitigation to reduce those to what

5 is generally deemed less than significant.

6 We are going to look at -- Part of the analysis is

also on alternatives, so mitigation often looks at various alternatives that can be applied; location, size. It really depends on the project. But we are going to look at various alternatives, and kind of at the end of the analysis we go ahead and look at the short-term and long-term impacts, accumulative impacts to, you know, the surrounding area, and any commitments of resources that can result from implementing the proposed action.

Most importantly, it really describes how the public concerns were addressed in the document. NEPA is a public involved, umm -- It's a process that's very heavy in public involvement, and so we take all -- consider all comments and concerns, and they are incorporated into our analyses.

So I want to make it clear to everyone, this is a

22 scoping meeting. And so I -- In this slide I've tried to

23 kind of describe what the scoping process really is about

24 and why we are here today.

25 Umm, public notice in general for NEPA, you know,

11

1 is to inform and update the public where the agency and

2 Department of Energy is in the EA process. It helps us

3 finalize the scope. The scope is all the items of concern

4 that we are going to look at in the EA. So we have a

5 general idea right now of what we are going to look at in

6 the EA, and we are inviting you folks today to help us

7 finalize that scope. Perhaps we are missing something, and

8 so we want to hear your concerns. This is an opportunity

9 to, not so much to ask questions, but to tell us your

concerns and any comments that you would like us to address within the document and our analyses.

So it's big on, umm, -- This really is your opportunity to provide some input prior to us doing our review and our analyses and all the research that goes into the document itself.

So Public Scoping. This is the first phase of public involvement. We do have another phase. I'll discuss that a little bit later, but this truly is the first phase, and we're going to engage the public, and we are going to ask for your input.

Umm, things that we are looking for from you today is any input that you have or information on our proposed action, which is the project; any alternatives you think we should address and include in the document; umm, any possible like mitigation measures that maybe should be

thought of or implemented in order to help reduce any potential impacts from our project. And if you have any data, you know, all that kind of information is what we are looking for today.

So this is what we have come up with. We have worked with our environmental consultant, who has been brought in to do the analysis and write the document for us. They have been working in conjunction with DOE, and especially OSU, and NNMREC in order to come up with this.

This is kind of our generalized outline for the Environmental Assessment. These are all the specific things that we are looking at potentially, umm, and analyzing, some obviously in more detail than others.

So we are looking for you to enhance this list for us. Anything that we are missing, anything that you think, Okay, it's on here, but, you know, you really think we should take a closer look at, this is your time to tell us that.

I'll leave that up for a little bit longer. It really speaks to the bulk of what this project is really all about, what you are looking at. If you have any questions, umm, at the end of this, after Meleah's discussion, we can revisit this slide and maybe go into what some of these things mean.

So this is about you, really, Public comments.

13

What do you need to know about commenting? We are here for a reason, which is because we know that the

community,

especially in Newport, is very proud of their community,

very proud of the environment in which they live, and we

want you to have a say in what we are doing here. So your

comments and concerns are very important to us.

We do have a court reporter here today that will be

getting all the comments. And anything that is said today,

either in this meeting or, umm, via comments later on, will

be addressed in some form in the environmental assessment.

We have several ways for you to provide comments on

the scoping tonight: Obviously, at this meeting, or we

have comment cards which are in your packets right now.

There's comment cards. You are welcome to fill them out

and turn them in today, or you can mail them in to us, or

you can e-mail them to us.

Currently, we are about a week into our public

scoping period. It is 30 days long. We're about a week into it, so we are going to take comments on public scoping -- on the scoping, as we discussed, up until May 27th. At that point, then we are working on the document. We are actually conducting the analyses, writing it, doing all our consultations and so forth.

The comment cards, as I mentioned, are in the information folder. We're going to have some more at the

14

sign-in table if need be. And, umm, this right here, that is my mailing address, so all your comments are directly coming to me. I will make sure they get to the right people for the analyses, and I do share them with OSU and our consultant and numerous people throughout DOE, but they

are, you know, they are part of our record, and like I said, you can send them to me. There is my address and my e-mail address.

A lot of people like to know what's next. Okay.

You provided us some comments; great. Umm, like I said, we are going to incorporate them as appropriate into the draft EA. Umm, and a lot of people don't like that "as appropriate." What I mean by that is truly if they are applicable to the project. You know, if something miles from here is going on and it is not truly applicable to this project, we will definitely take your comment into consideration, but we are looking for things very specific to this region and this project.

Once all comments, the comment period, and the draft review -- we do a lot of internal review -- and once

the draft EA is ready for what we call public review again,

we anticipate that to be out in early September, and we

have a current list of stakeholders. Some of you might

have received our postcards already. Those of you not on

it, I believe our sign-up sheet should have an area where

15

you put your address. If not, definitely send us a

comment. Include it in your comment card.

So this next comment period that will happen will

be really on the bulk of information. It will answer many

of the questions that you probably have tonight that we're

not going to be able to answer because we are still in the

early phases. But the EA is going to provide the analysis

and give you the information on the project and activity

and what the analysis will be on the various topics.

Once we receive all your comments on the draft EA, those also get incorporated into the final EA. We anticipate that coming out in early November. At that point, once the public has provided all their comments and we've consulted with various local and state agencies, as well as federal agencies, and complied with the various acts that NEPA is, umm, required to look at, we then take the information, and it goes to the powers that be, so to speak. And in this case it's my boss, the Golden Field Office's NEPA's compliance officer, and the Golden Field Office's manager, and they will make the determination either of a finding of no significant impact, or they will make the determination to proceed with the environmental impact statement.

I'll give you a little bit of background on that.

Uh, a finding of no significant impact, that's typically

16

after there has been quite a bit of coordination and

mitigation already incorporated into the EA. So there is a

lot that comes up to that, umm, you know, finding at that

point. It's not just, Okay, looks good; We're going to

issue a FONSI, an acronym that we use. But there is some

thought and mitigation and applicant committed measures

that are incorporated into the document. And if we feel

that that has met everyone's needs, the public, the various

agencies, and ourselves, then we will issue a FONSI.

If for some reason we cannot mitigate our way

through any of the potential impacts, then that will

elevate the project into an environment impact statement, which is a much higher level, umm, thorough review of the project and potential impacts. I'm not going to get into EIS's tonight, but we do have more information on our website about those.

So that's it for kind of the NEPA overview.

My coworker, Tim Ramsey, is going to come up and speak very briefly about the Water Power Program. We are very proud of the program, and we want to share a little bit of this program with you. And after he speaks, then we will have a really brief process question section, so I'll let Tim here take it over. Thank you, Tim.

TIM RAMSEY: Okay. Thank you, Laura.

My name is Tim Ramsey. I work for the Department

of Energy, the DOE field office. I'm just going to do a very, very, very quick, 5-minute overview of the DOE Water Power Program, and then we will talk about the project specifics.

So the Golden Field Office is one of two field offices that support the Department of Energy headquarters in Washington D.C. The other field office is the National Energy Technology Laboratory, and that's in Pittsburgh, Pennsylvania.

The Golden Field Office is the only one dedicated solely to EERE activities. And you can see in the slide how it funnels down from the Department of Energy, down to Secretary Chu, down through EERE. The Wind and Water Power Program is one of the programs in the Golden Field Office.

So there are ten programs within EERE. EERE, you

can think of it as kind of two parts. There is EE, which is Energy Efficiency, and those are the sort of programs that try to take existing industries and make them more efficient. And then there is the RE side, the Renewable Energy side, and that's the typical energies from renewable resources that you think of, solar power, biomass, and geothermal. And then, of course, what we are covering tonight, the Wind and Water Power Program.

You can see here just the Organization and the Vision Statement of the Wind and Water Power Program. The

18

Resources up there, there's three links.

Uh, the Department of Energy has a great website. All the programs are outlined there, and you can do some

reading on each of the programs individually, and some of the technologies that the programs use, and just get some background information on the programs.

The Water Power Program specifically started because of an act of Congress in 2007 called the Energy Independent and Security Act. That was developed in 2007. And basically it's a mandate from Congress to the Department of Energy to look at Marine and Hydrokinetic technology. And in that act they define marine and hydrokinetic as energy from ocean, current, tides, and ocean thermal energy conversion without building new dams or diversionary structure. And EISA also mandated the department to establish national renewable energy centers where developers can come and test their technologies.

So in 2008 Congress actually gave us our first

budget to elicit this project, and we received 10 million dollars. We went out, and our first funding opportunity covered three topic areas, so we decided to look at our resource assessment and kind of try to begin figuring out what the potential is all there, what type of energy we could get from marine and hydrokinetic, from water power.

Another topic area was to fund technology.



Developers can use their technology just a little bit further across the path of commercialization.

And then the third one was to actually establish the marine centers where they could go and test their technologies. And Oregon State was one of those that was selected. We selected the two national marine centers.

The other was the University of Hawaii.

Since that time our budget has grown steadily over the next couple of years. In 2009 we received 40 million dollars, and now for the second round of funding opportunities for 22 projects. And then we also received 32 million in Recovery Act funds, known as the Stimulus Funds from the Recovery Act Bill. And all of those projects were selected. Seven projects were selected and all that went to conventional hydro type projects. We were going into checking facilities, dams, and upgrading facilities. That's what we did in 2009.

We are now in 2010, and our budget grew a little bit more. We have 50 million dollars for this current fiscal year, and we have our third round of funding, uh, our funding opportunities, and that's now currently underway now, and that concludes in June.

And as far as doing business with the Department of Energy, we are a funding agency, and almost all of our finds are competitively selected, and we go through a bidding process through these funding opportunities. And these are some of the web sites where you can go if you do want to receive Department of Energy funding. Or, really, any agency funding.

The list here, the first FedConnect website, that is the main avenue where we tell people to go to look for Department of Energy funding. All agencies are there, or you could just kind of see the types of projects that DOE is soliciting, and kind of where the program is going by reading some of the information there.

Again, that was just a very, very quick, high-level overview of both the NEPA process and the Water Program.

In your folders, if you grabbed one, there is a business card in there with both Laura's and my e-mail address.

Feel free to e-mail us with any questions. This presentation will be on the public website, which is that first website there, and I believe it's also at the very, very bottom of that card in your folder, so you don't have to write that down. But if you have any questions about this presentation, feel free to shoot us an e-mail.

I believe we're going to take a quick 5-minute break if you have any questions for Laura or myself. If there are more specific project questions, perhaps about what we're actually funding here in Oregon, Meleah is going to talk next, and then we will have a long period of open

discussion for public comments.

JOHN LAVRAKAS: John Lavrakas. When I think of the environmental impact, the first thought is affecting the environment, which would be, you know, ocean life and things like that. And I noticed you had in there like marine navigation, so then I see that the effects there include maybe some other activities in the ocean. So the thought -- the question I have is, would it also include, you know, during normal operation there would be effects, but if things go wrong, then there would be additional effects that may affect agencies, or at least, umm, emergency service organizations. So would you consider those applicable in this case as environmental impacts?

LAURA MARGASON: It definitely could be considered a potential impact. NEPA is not just the natural environment. I like to truly think of it, and I had it up there, as the human and natural environment. So it is going to look at things. Umm, the fishing industry, that is a human environment, part of the human environment. We will look at that, and look at the socioeconomics, environmental justice sections. But how it affects the emergency response systems are a potential topic for analysis.

JOHN LAVRAKAS: Thank you.

LAURA MARGASON: Are there any other clarifying

22

questions?

UNIDENTIFIED MAN: If someone disagrees

with your final environmental assessment, is there an appeal process?

LAURA MARGASON: There is. Umm, NEPA is not, umm, -- I should know this. Just went over it today. It's truly up to the public to comment and appeal. Umm, often times, if there is an organization, umm, --

UNIDENTIFIED MAN: How do we appeal?

LINDA MARGASON: How? That's through the judicial system. Umm, specifically, I'm sorry, I do not know. But it is through the judicial system. I would imagine you hire a lawyer, and they would, umm, go through that process. But a lot of times, umm, through the public comment period we are going to address your concerns, so we are looking for specific concerns, things that you can specifically point out that, you know, we would hope prior to the decision that we would be able to mitigate.

And, you know, obviously not 100 percent of people are going to be happy with the decision. However, we do our best to incorporate everyone's concerns into the document and address those concerns.

UNIDENTIFIED MAN: It sounds like it's an appeal to the court.

LAURA MARGASON: It is. It's mainly through the judicial system, yeah. And then it is regulated mainly by

23

the public. There is no oversight from NEPA. We have regulations under, umm, the Council of Environmental Quality, which is under the White House, but other than that, it's truly up to the public, and that's why it is a public review process. We engage the public so they can

tell us their concerns. And DOE is truly looking to not go into litigation, so we are going to address your concerns, definitely.

KAETY HILDENBRAND: We probably have time for one more clarifying question. (Pause, with no comment.)

Okay.

MELEAH ASHFORD: Okay. Thank you for coming tonight to help us with our scoping process. My name again is Meleah Ashford, and I'm the Program Manager for the Northwest National Marine Renewable Energy Center, which we just call NNMREC.

Well, I'm going to tell you about the proposed project. But first I'm going to start with a little bit of overview about wave energy in Oregon and about our center.

So, by the way, why Oregon?

As Tim mentioned, there are a lot of different ways

to get renewable energy from the ocean, but in Oregon we have great waves. We have some of the best waves in the world, as you can see by the map there . The red areas are kind of the sweet spot, and they are along a, umm, usually

24

a west-facing coast where there is a long ocean that allows the waves to build up. So, uh, we have got good waves. We have a high coastal population, and our population generally gets its power from the other side of the mountains, so it would be nice to have a local power source.

We have a power infrastructure along the coast. The mills that were installed over the century had power coming to the coast. Power doesn't care which direction it

is going. So we do have a good infrastructure and electrical grid. And we have good research capabilities and capacities with Oregon State University and the Hatfield Marine Science Center here. And, also, the resource of waves as you see in the, umm, -- Let's see.

This is very slow. As you can see from the graph there, this is over time; wave, power over time. We get the biggest waves in the summer -- I mean in the winter, which is when you need to use that power.

So getting energy from the waves, there's a lot of different ways. There's over a hundred different devices out there right now, and we are in the process of -- The industry is in the process of down selecting to what is really going to be the power generation process now for wave energy.

You have shore-based facilities like

this, umm,

25

1 WaveGen here that sits on the shore, and waves come in and

2 blow air through a turbine out through the top.

3 Pelamis is a very famous one that's like a snake.

4 It undulates and, umm, fluid moves between those sections

5 and runs the turbine.

6 This is the Finavera Buoy, which you may be

7 familiar with. It was deployed out there. It plunges up

8 and down and runs a turbine in a vertical direction.

9 The Oyster here on the bottom is a -- is a near

10 shore device. It flaps back and forth. In that flapping

11 action it pushes the water onto the -- through a piping

12 system on the shore and runs a turbine.

13 The other two here are what we call point

absorbers, and they collect energy from the waves in a deep water situation. Not really deep, but like 150 to 200 feet deep. The OBT device, you probably heard something about that, about proposing some in southern Oregon. And that's, again, like a plunger device.

And this is Columbia Power Technology device down here on the bottom, and it gets energy use through several different types of motions; the motion of flaps coming down, and the sideways motion.

They are all innovative, but they are all very much in developmental stages, which is why we had so much interest on the coast.

So the Northwest National Marine Renewable Energy Center, we are a partnership between Oregon State

University and the University of Washington. They focus on tidal issues. They have large tidal resources coming in and out of the Puget Sound.

We are funded partially by Department of Energy, but we have a lot of local funds. The State of Oregon provided us money for the actual infrastructure, and we have various other funding agencies that are shown there on the side. We also partner with the National Renewable Energies Lab, who is helping us with some of the technical testing issues.

The idea of NNMREC is to develop a range of capabilities to support wave and tide and energy development, and this center is structured to facilitate the development through the testing process and the modeling process to form regulatory and policy decision

makers to close information gaps.

So we are really a virtual center. We don't have a, you know, a location itself. Umm, and we are divided into three different areas. The technology area: In addition to technology, we have a testing and demonstration, which is what this project is about. We look at wave forecasting, survivability, reliability of devices, anti-fouling and corrosion issues, and

27

device/array optimization issues. Those are all modeling issues, and they are all part of the process.

In the environmental area we are studying sediment transport, electromagnetic fields, Benthic ecosystems issues, acoustics, umm, and then we have some others on there. Marine mammals is another area that we are

studying.

And then in the human dimension we are looking at the impact on the inside of things, fisheries and crabbing, outreach and engaging, and we're working on existing users and the local economy.

So the proposed action is the design, construction, and operation of a mobile, full-scale, open ocean wave energy testing facility. And the, uh, the project consists of two of these testing devices, and I'll show you what they look like. And those two devices will be connected to two wave energy devices. So our two test berths, and then two devices, so there's four things in the water.

And we are also looking at an underwater substation pod, which is a device that connects the cables from the energy devices. And then it's eventually designed to take that back to shore, so if there was an array of

these

device s, the array can come together to one substation

pod, and then one cable could go to shore.

Umm, in our case we are not grid connected. The

28

idea is it is a mobile test facility. And the grid

connection results in a lot of issues that, not only the

community, but funding issues, we are just not ready to

tackle yet. So we are looking at this in a mobile sense.

And, umm, the site that we are considering is about

two nautical miles off of Newport.

So this is a drawing, a conceptual drawing, of what

the test facility looks like, the test berth itself. And

we are working with a design team of SAIC, Hyak

Electroworks. Glosten and Associates are working on a

mooring system. Peregrine Power is working on the power issue. And then R.E.C.S. is a company that's putting in the hull.

And it's a composite hull in a boat shape. It is formed after the NOMAD style buoy that NOAA uses. Umm, it has internal spaces that are all subdivided so they are all watertight, and it's designed to be a plug and play, so a variety of different devices could use our testing facilities, and they will literally plug their device into the Mobile Ocean Test Berth. And we would be measuring the current, the voltage, and the, uh, -- of the device itself.

There's other parts of the device that are bilge pumps, the shore -- The data would be transmitted back to shore. So we collect data about how the device is creating energy, and that data would go back to shore for analysis.

And there are auxiliary sensors that are looking at the motion of the test -- I'm sorry -- the motion of the device under test, and checking the strains on that device and, as I said, the power off of that device.

So this is -- This is a conceptual drawing of the typical type wave energy conversion device that we are focusing our efforts on being able to test at this point in time. So I showed you a bunch of slides of lots of different types of wave energy conversion devices, but, umm, we think that it will be these point absorbers that, umm, that will use our services the most.

And this is a picture of a three-point mooring system, and this is how the point absorbers will typically be moored. So you've got the device in the

middle, you've

got the power cable coming out the bottom, and you've got

the three, uh, three mooring systems, and the anchoring

system would vary depending on the device. We look at

probably a large dead weight anchor as the anchor that we

would use.

Now it gets a little more hairy. This is a picture

depicting what it would look like for our testing facility

connected to the wave energy device.

So, umm, we've got the wave energy device over here

with the three-point mooring. That's the photograph I just

showed you. And then it is connected to the test berth by

30

an underwater cable. The cable is probably going to be

about that big. A lot of data and a lot of information is

going to be pushed back and forth on that cable. And, uh, it -- Conceptually right now it looks like that the test berth itself will also be a three-point mooring. So you've got quite a few more cables out in the ocean.

Okay. This is a description of the underwater sub-sea pod. Some people call it a central junction box. But it connects multiple wave energy devices and, uh, will eventually be used for grid connection, although in our case we would not use it in a grid connection because we will not be grid connected. And it is an area that's targeted research for Oregon State, and it's being covered under NEPA because it's being funded by the Federal Government.

So this is a picture of the site that we are considering for the Mobile Ocean Test Berth, and, umm,

we've gone through a process where Oregon State has done two different tests of devices that were developed at Oregon State.

This test would be for commercial developers, but we do have some experience with testing of these devices that are -- that are not to the size that you are looking at with this one. We are looking at up to a megawatt, to have a capacity of up to a megawatt of energy from the



device. And the tests that we have done in the past were about 30 to 40 kilowatts. But, umm, -- So we know these devices need about 140 feet of water, out to possibly 200 feet of water. That's the area that we are targeting.

So we knew that there were some conditions that we

needed. We needed the 150 feet of -- 140 to 150 feet of depth, and we needed a soft, sandy bottom. And we wanted to make sure that it was close to a port so that we weren't spending a lot of boat time and lose a lot of operations in going back and forth, so we wanted to be close to a port.

We gave those considerations over to the FINE Committee, which is Fishermen Involved with Natural Energy, and we had discussions with them about where a site would be the least impact with them and from the fisheries standpoint, but meet the Oregon State criteria for that test berth.

So our final site will be one nautical mile by one nautical mile. But we have to date not honed in on exactly what one nautical mile, where it would be within this study area. So we have a big study area that's six square miles,

but the final site will be one square mile within that six square miles. And we have some additional community processes to go through to finalize the location of that one mile site.

Just some things to note. The red line on the map



is the Territorial Sea Line, and the territorial sea is what is under the jurisdiction of the State of Oregon, as opposed to what is beyond the Territorial Sea Line and is under the jurisdiction of the Mineral Management Service.

The regulations are different under the Mineral Management Service. That's not to say it is bad or good. It is different. We chose to be within the Oregon Territorial Sea. Primarily, that's the depth range that we are

targeting.

Okay. So other agencies and approvals that will be necessary for this project. So we are going through the NEPA process right now because the federal action is funding of this design, construction, and deployment of the Mobile Ocean Test Berth. But prior to the deployment there's a lot of other agencies involved. Primarily through the Corps of Engineers. So prior to deployment of this, we will need a permit from the Corps of Engineers, and we will do that process separately.

Uh, we will be going through consultations with NOAA; the National and Marine Fisheries Service; the Department of State Lands; Department of Land Conservation and Development to look at consistency with the territorial sea plans; the Department of Environmental Quality; the Coast Guard; Parks and Rec.

25 We will not be going through FERC because we are

33

1 not grid connected. That's the Federal Energy Regulatory

2 Commission. We are not grid connected, and so we don't go

3 through FERC. And we don't go through the Mineral

4 Management Service because we are within the territorial

5 sea.

6 So I just want to bring this up. Uh, as we've gone

7 through this process, it is important for us to have input

8 from the community. To date we have had really good input

9 from the FINE community, and they helped us understand some

10 of the issues that we will be facing when working with the

11 ocean, and have made us acutely aware of the impact that we

12 will have on the fishing industry.

But, uh, we also realize there are other people in the community that we would like to have engaged in the process. So as the test berth goes forward, not only to the design and the construction of the test berth, but on to the operation of the test berth, we felt it would be important to have a group of people from the community that would be involved in helping us make sure we are considering things, umm, that we -- that we may miss along the way, including discussions about the study, the study area and the siting area that we have.

So we have put together a Test Berth Committee, and in your packet there is an application form for that Test Berth Committee. It describes what we expect from people

who would like to be involved in this committee. And we anticipate the responsibility would be a commitment up to about two years, attend meetings, uh, around four times a year. Of course, that would be different depending on what was going on.

And the make-up of the committee, this is just a general description of it. The ones in the packet is just a little more accurate. This is a Mac, and I wasn't able to make the last minute changes to this. But basically the local communities, recreational fishermen, commercial fishing, ports, the wave energy device developers, the recreationalist, and conservationist, the marine researchers, the utility groups, economic development.

And, uh, the one missing off here is just the general public.

So I wanted to get in that little plug.

If you want to be involved in the process, we would love to have you involved through that Test Berth Committee.

I believe that's the last of my slides, and I will turn it over to Kaety, who will talk about the public comments.

KAETY HILDENBRAND: Great. So next we have quite a bit of time, actually, to receive public comments. We do have a microphone that's going to be going around.

Umm, we're going to limit it to three minutes per

35

speaker, and if time allows, you can speak again at the end. We do have a court reporter present here, so make sure to state your name in the beginning of comments. And if you have a difficult spelling of your name, please spell

it out for us. And let us know if you are speaking as yourself or for a group. Again, the comment cards are in your packet as well.

To start it off, we're going to go down the list of when people said they want to comment when they signed in tonight. The first one is Chuck Pavlik. The microphone is coming.

JOHN HORST: I'm John Horst. Just go ahead and say your name again so it's on the record.

CHUCK PAVLIK: My name is Chuck Pavlik, P-A-V-L-I-K.

On your map here, your six-mile area, how long do you anticipate that that would be in effect, the six miles, before you go to your one square mile?

KAETY HILDENBRAND: So the purpose tonight is to look at and sort of scope out the entire six-mile site, and then through some of the things that are

addressed through

22 the process, as well as some other statements and comments

23 that are received through the various processes, umm, the

24 actual one-mile site will be chosen from all of those

25 comments. So in the near future, before the first buoy



1 goes into the water, we will have this one-mile site

2 selected. It's depending on various devices, and that

3 one-mile site could change, depending on the needs. I

4 guess that's one of the good things about staying mobile

5 with the test berth; we can move it around.

6 Does that answer your question?

7 CHUCK PAVLIK: Yeah. I live down the road in

8 Waldport. I'm a sports fisherman, and I keep a boat in

9 Newport six months out of the year, and I fish a lot right

in your blue area that you have highlighted. And, uh, it's a very popular halibut fishing area, salmon later in the year, as well as crabbing; not commercial, but sport. And, uh, basically, when I look at that, uh, I see a six-mile area where no trespassing signs are posted. Tell me that isn't so.

KAETY HILDENBRAND: The six miles will not be off limits. There will be a one-mile area that will be off limits, not six miles.

CHUCK PAVLIK: Okay. Did you -- When you were choosing your site, did you consider any areas further from Newport? Did you -- For instance, did you look, uh, at the area down by Waldport? When you get that far south, you've eliminated 98 percent of the sports fishing during the summer season out of Newport. There's literally

hundreds of boats that use this area, you know, like a



bunch of bees around the hive. They never get far from the jetties and the mouth in that area where you are at, a little bit south and a little further out. They stay pretty close to home. And, uh, just looking at your selection, uh, did you not look further south or further north to get further away from such a high use area?

KAETY HILDENBRAND: Umm, I'm kind of speaking for the people from OSU. In the criteria that was set down, for the people at OSU Waldport was too far for them. They wanted to be closer to, umm, the jetty entrance to be able to service that project.

CHUCK PAVLIK: Well, I can appreciate their desire

to have a convenient area, but Waldport is about 15 miles south, and, uh, they do have several million dollars worth of boats, OSU does, that are research vessels that could be used to get south or north to an area that didn't have any conflicts with sports fishermen out of Newport. Newport is the busiest area on the Oregon Coast as far as sports fishing goes. There are lots of boats, lots of fishing, a lot of people that use it for recreation all summer long. And, uh, for you to take away part of that area when there really isn't a need to, if you could just relocate a little ways, I think you have other options available.

JOHN HORST: Thank you very much.

KAETY HILDENBRAND: Uh, the next one that had a

38

question mark next to the name is a John

Sherman. Is John

Sherman still here?

UNIDENTIFIED VOICE: He stepped out.

KAETY HILDENBRAND: Okay. Another name with a question mark was Mike Donnellan.

MIKE DONNELLAN: I'm Mike Donnellan, and --

JOHN HORST: Use this.

MIKE DONNELLAN: My name is Mike Donnellan. And I have a question just about the six-mile site. I understand it was developed with community input. So is that set in stone, or is that still, uh, potentially movable? In particular, I'll tell you why: Because Yaquina Head is an extremely important area for sea birds, in particular common murrers. About 80 or 90 thousand birds nest there and use that area, which is north, and, uh, British Columbia and Washington. And it's in a great whale migration corridor, so I was just wondering, is

that set in

18 stone?

19 LAURA MARGASON: Uh, Kaety did the last one, and

20 I'll get her out of the hot seat this time. So the answer

21 is that it is not cast in stone. We did go through a

22 process of what areas and what parameters Oregon State

23 developed were critical for the success of the Mobile Test

24 Berth, and then we did work with the FINE group to talk

25 about, you know, where from a fishing standpoint that area



1 would be best placed. And, uh, this six square miles that

2 we came up with, in the end there would be one square mile

3 that we would end up with. So, umm, it is at this point

4 the most desirable location for us, but it is not cast in

5 stone.

MIKE DONNELLAN: Thank you.

KAETY HILDENBRAND: Is there anybody else who wishes to comment that did not mark that?

JOHN HORST: Let me make my way to the back.

KAETY HILDENBRAND: Sure.

STEPHEN WEBSTER: Thank you very much.

JOHN HORST: What's your name?

STEPHEN WEBSTER: Umm, Stephen Webster. I've got two questions. Umm, if the site is finally permitted, is there any sunset to this permit? Is this in perpetuity? What's -- What's the time frame that the permit, uh, its life span?

LAURA MARGASON: You know, I have to say that I don't know how long the Corps of Engineers permit lasts. But our intent is that, umm, that we are looking at a ten-year horizon for the operation of the test berth. That is the best that we can foresee at this point

in time.

STEPHEN WEBSTER: My second question is, uh, what is your budget for ten years? What is your annual budget? If you could give some, uh, rough sketch of what that

40

budget entails.

LAURA MARGASON: Okay. Uh, the budget for the Mobile Ocean Test Berth is about 3 million dollars for the design and construction. And that's what we are looking for in the standpoint of funding.

Umm, the operation and maintenance and the management of the testing is to be determined. You know, we have some general ideas of, you know, how much management it would take and how much operation costs will be, but until that gets finally designed, we don't have

that information at this point.

STEPHEN WEBSTER: I don't have any other questions.

The only other comment I would like to make is I would be like Mr. Pavlik, noting that you are contending for prime real estate and that you couldn't choose an area that's probably more -- has any denser use in our region. Thank you.

JOHN HORST: Thank you. Appreciate your input.

Okay. Right here. I'd have you state your name.

JOHN LAVRAKAS: John Lavrakas, L-A-V-R-A-K-A-S.

I have a company, Advanced Research Corporation. We've recently figured an infrastructure investment for wave energy in Oregon. In it we learned that one of the issues that came out was the availability of emergency services for conditions when the, umm, things go wrong.

And in this case I would ask that attention be paid to those services as part of the environmental impact. It could be where someone works the vessel. When the ship gets in trouble, they get tangled up in the lines, or the vessel breaks free. In any of those things there is a tax on the emergency services. And they need to be aware of what kind of situations could occur so they are prepared; they have some kind of contingency planning that will work with you all working with them. That's my recommendation.

KAETY HILDENBRAND: Okay. I think I saw one more hand in the back.

JOHN HORST: Who had another comment? Okay.

DANIELLE ASSON: Hi, my name is Danielle Asson,

A-S-S-O-N, and I guess I had a question about -- You said it was going to be anchored by the three -- that little tripod anchor setup. And I was wondering if you were considering any other options for anchoring, because I know how much -- how much environment that those anchors actually impact, uh, like how big the concrete blocks have to be in order to keep that stable. And it doesn't seem very mobile to me as well.

I'm just wonder ing if you are taking that into consideration or if there are any other options on the table for anchoring. You know, I mean it is -- you have to figure out how best to do. But I do know that those

42

anchors seem to have a pretty large impact on the

environment, and, also, I don't see how they would be easily moved. And so I was just wondering if you guys are considering anything else, if there are any other options on the table, if there is any way to do this with maybe a lesser environmental impact. That's all.

LAURA MARGASON: Okay.

JOHN HORST: Thank you very much.

LAURA MARGASON: We are, you know, in the early, early stages of the concept of the Mobile Ocean Test Berth. And depending on the final weight, that will be dictated by the components that are inside the mobile test berth, which are dictated by what the wave energy devices need us to provide them, uh, which will determine the types of mooring that we have to do.

So we are considering Danforth anchors, which are, you know, kind of a traditional type anchor, and the dead

weight anchors. And I think that the hope would be we could use Danforth anchors, but it will depend on the final weight and configuration of the test berth, whether those anchors will be adequate or not.

Also, with the mobile test berth itself, that anchoring system will stay for the duration of the test berth site, so they won't be moved. So there will be marker buoys that the test berth, when it does go into port

43

for maintenance, whatever, uh, they will stay there, and then it will come back out and hook up to those moorings.

Now, for the wave energy converter itself, those moorings will be brought in, and my understanding is that they bring in their full-size moorings. They are not able

to -- they want to test a full-scale ocean device. So they put in their full-scale mooring and anchoring system, and at the end of the test it is our plan to have them take those out. But the mooring system for the Mobile Ocean Test Berth will stay in.

DANIELLE HESTON: If you're planning on -- Danielle Heston, H-E-S-T-O-N.

If you're planning on testing multiple devices, is there any way that you could leave the mooring and just hook the mobile devices up to them?

LAURA MARGASON: Yeah, that's a -- That's a consideration, and it would be up to the wave energy device developers. The devices, by the time they get to the point where they are testing on a full scale, are very expensive. And there's a lot of liability associated with the moorings and anchoring systems that they would not want to pass from

22 one developer to another.

23 So based on experience in Europe, each device

24 developer's anchoring and mooring system is a little bit

25 different than the last one. So the chances that one



1 system would work for another are pretty slim. So our

2 intent is that they would remove that at the end of their

3 test -- remove their system at the end of the test.

4 DANIELLE HESTON: I got one more question.

5 LAURA MARGASON: Yeah.

6 DANIELLE HESTON: Uh, so when this finally comes, I

7 guess, into being, uh, I don't know if you will be able to

8 answer this. Umm, are you planning on testing multiple,

9 like varying, all different types of wave energy things and

with the intention of putting them along the Oregon Coast,

or just to see, I guess, how they work?

And if you are going to -- if they are going to be

put on the coast, will we have a say in which device we

ultimately use? Because I know a little bit about the

devices, and I know which one I prefer. So will that --

will this process be continued when it comes to actually

starting to use that wave energy so we can base our

opinions on like which devices we think should be there

based on how much energy they give, and also with the

environmental impact?

LAURA MARGASON: Umm, that's a good -- A pretty

quick answer to that is, umm, only if it is federally

funded. Because the NEPA process is the public, umm,

involving the public. If it were an action that, uh,

either the Department of Energy or Army Corps

of Engineers,

45

1 if it is a federally funded project, then yes, there will
2 be a public process to allow people to comment on.
3 The intent of this project is mainly to provide
4 testing. Umm, a little background: A lot of times you
5 need to verify a concept and test it in, umm, you know, in
6 an ocean environment in order to prove the capability of
7 the technology, and that is what this is going to be.
8 That's the intent of this test unit.
9 Where it goes from there, it's really up to the
10 developer at that point and what they foresee as an
11 applicable area for their deployment of their technology.
12 So the public will be able to come into play if it is
13 government funded at this point, you know.

But the permitting process does involve other federal agencies, so even if DOE doesn't, there is FERC and Army Corps and MMS, and they are all subject to the NEPA, and they have their own public review process. So it's always good to keep your ear open for these type of deployments.

DANIELLE HESTON: Thank you.

KAETY HILDENBRAND: Any other comments?

JOHN HORST: And, again, for this entire process, we are very grateful that you are here, and your concern to see some interest.

WIL BLACK: My name is Wil Black, and I also work



for Advanced Research Corporation. I have kind of a two-part question. They are related questions.

First of all, who -- who as far as wave developers have expressed an interest in putting their devices to be tested with the Mobile Ocean Test Buoy? And the second part of that is, umm, why would they want to do that when already they are putting devices by the end of the summer down in Reedsport doing this? And they are putting devices in the water around the world. Why do they need to use these?

MELEAH ASHFORD: Okay. I will answer those. We have a couple of developers, and I'm not going to name names, but we do have a couple of developers, and we plan on the first version of the test berth really to be focused on point absorbers, so those are ones that float vertically in the water, up and down, basically. And, umm, so we have talked with several people who are interested. We've got

some scheduling things to work out.

And, umm, the process that you are talking about in the south, in Reedsport, where OPT is planning to put their one buoy in there, they are just ahead of us. They have indicated that if the test berth was ready, they would use it, but they are ahead of us in the process.

So if they can go ahead without the need for the test berth, I think is what your second question is, why

47

would you build a test berth? Umm, the OPT has tested their device, and is testing their device now at the test facility in Europe. The premiere test facility in the world is called the European Marine Energy Center. It's on the north shore of Scotland, the island of Orkney, and, umm, they have four test facilities there that

are grid

connected, and they are fairly well booked out. So there

is a lot of interest in testing these facilities. And OPT

has tested their device there. You can -- You can develop

your device without a test berth, but you don't get that

third party, reliable information that we believe and DOE

believes that the world needs.

You need a standardized process, you need

standardized testing, and it needs to be at some point a

third party so that it is well accepted.

WIL BLACK: So there has been pretty good industry

interest in that?

MELEAH ASHFORD: Yes, we are working with

developers at this point.

KAETY HILDENBRAND: Final comments?

JOHN HORST: Just restate your name.

MIKE DONNELLAN: My name is Mike Donnellan. I just

have one more question. It's my understanding that there's another federal funding wave energy project just offshore of this. Uh, it was a successful grant by OSU. I think it



was Minerals Management Service or something. So I'm just kind of wondering about the bigger context here.

KAETY HILDENBRAND: Yeah. I think the project you are referring to is actually not. It's related to sort of energy and the ocean, but it is not a wave energy project. It's actually a team of social scientists at Oregon State University looking at outer continental shelf uses and sort of how to mitigate or reduce conflict with energy producing devices that are put in the ocean. It is not specific to Oregon or this site. It's actually a project being done

both on the West Coast and on the East Coast. This is not a specific, you know, power project. It's looking at just how to reduce conflict more in different regions in the ocean. That's the only one that I know of that you might be thinking of.

MIKE DONNELLAN: Yeah, that sounds like it.

KAETY HILDENBRAND: Okay.

DICK BRIM: I'm Dick Brim. I apologize. I got here late. So if my question has been answered earlier, please let me know, and I'll get the (inaudible).

I'm curious. You have an onsite study area of six square miles with a final site of the one square mile. Can we assume that after you've made that final site selection that the other five square miles will be released and won't be used?

UNIDENTIFIED SPEAKER: That is correct. We made a commitment to the community, and the FINE group in Lincoln County was involved in that, that our site at this point would be one nautical mile by one nautical mile. And we were not able to come to a conclusion on exactly the one mile by one mile square yet, but there was general agreement about the six mile square area that allowed us to start the NEPA process. And before we get permits for deployment of the device, we will have one mile by one mile. And those are nautical miles.

DIFFERENT UNIDENTIFIED SPEAKER: I just want to clarify, those six miles are not closed now. It is not like they need to be released after we decide. We are just looking at it, so it's not closed. None of it

is closed at
this point.

DICK BRIM: Thank you.

KAETY HILDENBRAND: Anyone else?

JOHN HORST: I can handle this side of the room. I think we are okay.

LAURA MARGASON: Okay. I think it is official. I just want to thank everyone for the comments. We heard some really, very important things, umm, and received some great input. And rest assured, we're going to take all of your concerns and comments into consideration in developing the EA. Those of you who are on our mailing list, who have



received cards -- Those of you who have not, please make sure you send us some type of comment, or at least your name and address, to either -- preferably to

myself. I will make sure that you get on the distribution list for notification when the draft EA comes out. And other than that, that will be our next step. So thank you for attending tonight, and we appreciate all your comments.

SARAH HENKEL: I was just wondering, if people who spoke tonight, if they can still make any further comments?

LAURA MARGASON: Yes. I mentioned that before. You have until May 27th. Per our regulations, we have a 30-day window for scoping comments. It is the same with the draft environmental assessment comes out. It's going to be a 30-day window for anyone to provide their comments.

And so please have e-mail or mail your comments to me by the 27th. As long as they are postmarked, you know, we have a couple days. We are not very strict about dates,

but please try to have them in by that point. At that point we are already writing the EA draft, and we need those scoping comments by then.

Thank you, everyone.

(End of meeting)

*****

51

COURT REPORTER'S CERTIFICATE

I, Lee Blackwood, Certified Court Reporter for the State of Oregon, do hereby certify that the statements set forth in this matter are a true and correct transcript of said statements.

I further certify that the statements were made before me at the time and place set forth in the caption

hereof; that at said time and place I reported in Stenotype all proceedings had in the foregoing matter; that thereafter my notes were transcribed by me; and that the foregoing 50 pages constitute a true and accurate transcript of my original stenographic notes.

In witness whereof, I have hereunto affixed my signature this 21st day of June, 2010.

Lee Blackwood
Certified Court Reporter
Certificate No. 90-0130

# Scoping Meeting Sign-In List

*U. S. Department of Energy*
*NEPA Scoping Meeting for the Northwest National Marine Renewable Energy Center (NNMREC)*
*May 5th, 2010*

| NAME | ADDRESS/ZIP CODE | ORGANIZATION | TELEPHONE | EMAIL ADDRESS | Do you wish to **comment** tonight? |
|---|---|---|---|---|---|
| Chuck Pavlik | 785 Bayview Lp Waldport OR. | Sport Fisher | 563-5965 | Muleskinner@Peak-ORG | yes |
| John Lavrakas | 1542 N Nye st Newport 97365 | Advanced Research Corp | 265-9690 | jlavrakas@oregonarc.com | |
| Bob Hardy | | Self | 921-0294 | | No |
| Danielle Asson | | self | | | |
| Danielle Heston | 97333 | self | | | No |
| Theresa Wisner | PO Box 434 97380 | AMP | 541-444-2334 | twisner@hughes.net | no |
| MIKE MORROW | Po Box 942 Corvallis OR 97339 | M3 WAVE | 541 602 4160 | MIKE@M3WAVE.COM | No |
| Maryann Bozza | HMSC | | | maryann.bozza@oregonstate.edu | No |
| Richard Brun | 870 SW 29th St #D Newport, Or 97365 | | 541-867-7051 | rockymtn_5@hotmail.com | No |
| Jed Smith | 157 NW 15th St. Newport OR 97365 | ARC | 541 2659890 | jsmith@oregonarc.com | NO |
| Wil Black | 88 Pioneer Trail Toledo, OR | Advanced Research Corp | 541-270-9512 | wil.black@oregonarc.com | no |

*U. S. Department of Energy*
*NEPA Scoping Meeting for the Northwest National Marine Renewable Energy Center (NNMREC)*
*May 5th, 2010*

| NAME | ADDRESS/ZIP CODE | ORGANIZATION | TELEPHONE | EMAIL ADDRESS | Do you wish to **comment** tonight? |
|---|---|---|---|---|---|
| Terry Lettenmaier | PO Box 550, South Bend | | 541-867-4603 | lett@peak.org | No |
| Yvonna Lekiland | PO Box 757 Waldport OR 97394 | | 541-563-4046 | wldpt@yahoo.com | no |
| STEPHEN WEBSTER | 113 SE BAY Blvd Nt. | | 265-9243 | siletzbw@charter.net | no |
| Sharon Nieukirk | | OSU | 541 867 0268 | sharon.nieukirk@oregonstate.edu | No |
| John Sherman | P.O. Box 1676 Newport 97365 | | — | — | ? |
| MIKE DONNELLAN | | ODFW | | | ? |
| Bruce Lovelin | | CLPUD | | blovelin@cencoast.com | No |
| Caren Braby | | ODFW | | | |
| KHEM SO | 417 SW 6th | | | Abhayadana@yahoo.com | |
| Sreanna Steingass | Hatfield | OSU | 307-752-0244 | steingas@onid.orst.edu | no |
| | | | | | |

*U. S. Department of Energy*
*NEPA Scoping Meeting for the Northwest National Marine Renewable Energy Center (NNMREC)*
*May 5th, 2010*

| NAME | ADDRESS/ZIP CODE | ORGANIZATION | TELEPHONE | EMAIL ADDRESS | Do you wish to **comment** tonight? |
|---|---|---|---|---|---|
| Sarah Burnett | 1877 21st Ave SE # 28 Albany, OR | OSU | 972-965-1355 | burnetsa@onid.orst.edu | No |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |