

## BEFORE THE OREGON WATER RESOURCES DEPARTMENT

Cumulative Impacts Review	)	Proposed Findings of Fact
For Hydroelectric Application HE 591	)	and
Reedsport OPT Wave Park, LLC	)	Proposed Order
10 Buoy Hydroelectric Project	)	

This matter comes before the Director on application of Reedsport OPT Wave Park, LLC (Applicant) for a hydroelectric project. The issue before the Director is whether the proposed project may contribute to cumulative impacts with other existing, approved or proposed hydroelectric projects in the same river basin. ORS 543.255. It is presumed that if there are other existing, approved or proposed projects, in the same river basin, there is a potential for cumulative impacts. OAR 690-51-290 (1). This presumption may be rebutted by showing the impacts of the proposed project are so small in extent, short-termed or localized that there is no reasonable likelihood of cumulative impacts. *Id.*

The Department is presenting these proposed findings of fact in order to consult with other agencies listed in OAR 690-051-0060 on cumulative impacts. Natural resources on which the potential for cumulative impacts are considered are listed in OAR 690-051-0190 through 690-051-0250. *Id.* This Proposed Order presents findings of facts and conclusions of law to find that this project is the first of its kind off of the coast of Oregon. There are no other existing, approved or proposed hydroelectric projects in the Pacific Ocean at this time.

**This is a Proposed Final Order on the Potential that the Proposed Reedsport Wave Park Hydroelectric Project may contribute to Cumulative Impacts with other Existing, Proposed or Approved Hydroelectric Projects in the Pacific Ocean. A consolidated review with other existing, approved, or proposed projects is NOT required.**

Any person may file a protest to this order and request a contested case hearing within 30 days of issuance. A protest must be filed in writing and received at the Oregon Water Resources Department no later than 5 p.m. **May 19, 2011**. The petition must be accompanied by a fee of \$600.

## **I. APPLICATION HISTORY**

On February 12, 2010, Reedsport OPT Wave Park, LLC (Applicant) submitted an application to the Department for a major hydroelectric project to place 10 PowerBuoys in the Pacific Ocean off of Douglas County near Reedsport, OR. The PowerBuoys are capable of producing up to 150 KW each, for a total project size of 1.5 MW.

The Department determined that the application, maps and information required by ORS 543.010 to 543.290 and OAR 690-51, together with the Final License Application filed with the Federal Energy Regulatory Committee (FERC) under project number p-12713, were complete.

Notice of open comment period and public hearing was included in OWRD's weekly public notice published on March 16, 23, 30, and April 6, 2010. An e-mail notice was sent to city of Reedsport, Douglas County Planning Department, state and federal agencies, the local watershed group and interested citizens. Agencies notified included:

- Oregon Department of Fish and Wildlife (ODFW)
- Oregon Department of Environmental Quality (ODEQ)
- Oregon Division of State Lands
- Oregon Department of Forestry
- Oregon Department of Agriculture
- Oregon State Historic Preservation Office
- Dave Williams, OWRD Watermaster, District 15
- Legislative Commission on Indian Services

The notice of open comment period and public hearing were also published in The Umpqua Post for 4 Wednesdays – March 17, 24, 31, and April 7, 2010. The announcement was sent by email to the Ocean Policy Advisory Committee which advises the Oregon Department of Land Conservation and Development and to the public on its list-serv through the State Library.

A public hearing was held at the Reedsport High School in Reedsport on April 7, 2010 from 7:00 p.m. to 9:00 p.m. The purpose of the meeting was to receive comments on the application and discuss whether any impacts of this project might be cumulative with other proposed or existing hydroelectric projects in the Pacific Ocean near Reedsport, OR. Requests for additional studies related to project impacts could also be submitted.

The meeting was held in conjunction with the FERC's staff meeting to prepare a scoping document for an Environmental Assessment for the Project. A presentation about the project was given by Phil Pellegrino, for the Applicant. Five members of the public provide oral comments at the meeting. A transcript of the meeting is available at:  
[http://elibrary.ferc.gov/idmws/file\\_list.asp?accession\\_num=20100407-4006](http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20100407-4006)

The comment period was open 60 days until May 10, 2010.

## II. PROJECT DESCRIPTION

The proposed Project is described in the FERC environmental assessment document available at this link: [http://elibrary.ferc.gov/idmws/file\\_list.asp?accession\\_num=20101203-3009](http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20101203-3009)<sup>1</sup>. The following description is from the environmental assessment.

The 1.5-megawatt (MW) project would include 10 wave energy conversion devices moored in Oregon State territorial waters about 2.5 nautical miles off the coast near Reedsport, of Douglas County, Oregon. The onshore portion of the project, located in Douglas County, would occupy about 5 acres of federal lands administered by the U.S. Department of Agriculture, Forest Service. The project would generate an average of about 4,140 megawatt-hours (MWh) of energy annually.

The Project would involve the installation of 10 OPT PowerBuoys attached to seabed anchors, tendon lines, subsurface floats, and catenary mooring lines. The PowerBuoy units would be deployed in an array of three rows oriented at an angle to the shore and would occupy about 0.25 square mile of the Pacific Ocean. The 10 PowerBuoy units would be connected to a single underwater substation pod via power/fiber-optic lines. A subsea transmission cable would be buried in the seabed to a depth of 3 to 6 feet, would extend from the underwater substation pod to an existing wastewater discharge pipeline, about 0.5 mile offshore. The subsea transmission cable would be routed through the wastewater pipeline to a newly constructed underground vault, inland of the sand dunes. At the vault, the transmission cable would join to an underground transmission line, re-enter the existing wastewater pipeline, and be routed through the pipeline to the point at which it would connect to the Douglas Electric Cooperative transmission line at a proposed shore substation.

OPT proposes to implement the following measures to minimize or mitigate for environmental impacts of the Project:

- Light PowerBuoys in accordance with U.S. Coast Guard regulations to provide for navigation safety.
- Locate subsurface mooring floats at depth of 30 to 50 feet to avoid potential vessel strike.
- Equip PowerBuoys with materials to prevent pinnipeds (seals and sea lions) from using the buoys as haul-outs (resting sites).
- Route 0.5 mile of the subsea transmission cable and all of the terrestrial transmission line through an existing wastewater discharge pipeline to minimize disturbance of beach and shoreline areas.
- Bury the rest of the subsea transmission cable to a depth of 3 to 6 feet in the seabed to minimize electromagnetic fields (EMF) and the potential for fishing gear loss.

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1. Notice of Availability of Environmental Assessment re Reedsport OPT Wave Park, LLC under docket p-12713, FERC, December 3, 2010

- Implement the proposed Adaptive Management Process, which would guide the implementation of monitoring studies and identification of measures that may be required to address unanticipated effects.
- Implement the proposed Emergency Response and Recovery Plan, which would describe notification procedures and preparedness actions for any unforeseen event that could compromise the mooring system of one or more buoys or create a hazardous situation.
- Implement the proposed Spill Prevention, Control, and Countermeasure Plan, which would describe the response measures and procedures that would be in place if a release of hydraulic fluid were to occur.
- Implement the proposed Operations and Maintenance Plan, which would include periodic inspection of underwater project components of the project every 2 to 3 months for the first 2 years of operation and annually thereafter to identify and remove derelict fishing gear.
- Implement the proposed Crabbing and Fishing Plan to address potential effects on crabbing, fishing, and navigation, which would include collaboratively developing methods to minimize the potential for loss of fishing gear, imposing a transport moratorium and defining transit lanes to minimize impacts of project vessels on the crab fishery, and implementing a marine use/public information plan to inform commercial and recreational users of the location and design of the project.
- Develop and implement an interpretive and education plan, which would include the design and installation of interpretive displays onshore to inform the public about the location and composition of project facilities.
- Implement the Terrestrial and Cultural Resources Plan, which would include measures to protect any cultural materials that are discovered (no measures to protect terrestrial resources are included because OPT does not expect any effects on terrestrial resources).
- Implement wave, current, and sediment transport monitoring to assess any unanticipated effects on wave heights, coastal sediment transport, and depositional processes.
- Implement fish and invertebrate monitoring to assess any unanticipated effects of project structures on the fish and invertebrate community.
- Implement EMF monitoring to assess any unanticipated effects of EMF levels on sensitive aquatic species.
- Implement cetacean monitoring to assess any unanticipated effects on whale migration and the potential for whale entanglement.
- Implement pinniped monitoring to assess any unanticipated effects on the abundance of seals and sea lions.

- Implement OPT's proposed protocols for reporting marine mammal injury.
- Implement offshore avian use monitoring to assess any unanticipated effects on avian collision mortality.
- Conduct a visual assessment review to assess any unanticipated effects of the project on aesthetic values of the project area.

### **III. EXISTING, APPROVED AND PROPOSED PROJECTS**

In determining whether the impacts of the proposed project would be cumulative with existing, approved or proposed hydroelectric projects in the same river basin, the Director has made the following findings of fact.

This is the first hydroelectric project that has been proposed to be located in the Pacific Ocean within the 3-mile territorial sea of the Oregon coast. There are no other existing, approved, or proposed hydroelectric projects in the same basin.

This Project is intended to be the second stage of a three stage build-out for a wave park. This stage will provide much needed technical information about project performance and effects (or non-effects) on natural resources in the project area. Stage 3 cannot proceed without the knowledge and experience of this phase 2 project. The Stage 3 project has a preliminary permit for study purposes with FERC. Much of the environmental information for that project will be generated from this 10 buoy project.

There are no other hydroelectric projects that have submitted final applications to either FERC or the State of Oregon at this time.

For this 10 buoy project, there is no potential for cumulative impacts with other existing, approved or proposed hydroelectric projects and there is no need for a consolidated hearing on this Project.

### **IV. PROPOSED CONCLUSIONS OF LAW**

1. Since there are no other existing, approved or proposed hydroelectric projects in the Oregon territorial sea, there is no potential for cumulative impacts ORS 543.255; OAR 690-51-290 (1).
3. A consolidated review with other hydroelectric projects in the basin is NOT required.
4. The applicant must yet demonstrate in a contested case hearing that the proposed project will not impair or be detrimental to the public interest.

## VIII. PROPOSED ORDER

Based upon the above findings and conclusions, there is no presumption that the proposed project may contribute to cumulative impacts with other existing, approved, or proposed hydroelectric projects in the same basin and a consolidated review is NOT required.

Issued April 13, 2011

  
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DWIGHT W. FRENCH, Administrator of Water Rights Services  
{For}  
PHILLIP C. WARD, DIRECTOR

## IX. PROTESTS

Any person may protest this proposed order and request a hearing as provided by the Administrative Procedures Act, Oregon Revised Statutes Chapter 183 by filing a protest and request for hearing by **May 19, 2011**. A protest must be in writing, accompanied by a fee of \$600, and received at the Oregon Water Resources Department by **5 p.m. on May 19, 2010**. ORS 536.050(1)(j). Persons may mail or deliver protests and requests for hearing to:

Mary Grainey  
Oregon Water Resources Department  
725 Summer Street NE, Suite A  
Salem, OR 97301

Any person may be represented by legal counsel at the hearing. Any person requesting a hearing will be notified of the time and place of the hearing and given information on the procedures, right of representation and other rights of parties relating to the conduct of the hearing before the commencement of the hearing. Any hearing will be held by an administrative law judge from the Office of Administrative Hearings.

If you do not request a hearing within the time specified in this notice, or if you withdraw a request for hearing, notify the Department or the administrative law judge that you will not appear or fail to appear at a scheduled hearing, the Director may issue a final order. If the Director issues a final order by default, the Director will designate the Department's file on this matter as the record for the purpose of proving a prima facie case upon default.

For Further Information Contact: Mary Grainey 503-986-0833, [Mary.S.Grainey@ wrd.state.or.us](mailto:Mary.S.Grainey@ wrd.state.or.us)