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BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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REEDSPORT OPT WAVE PARK PROJECT : Docket Number
: P-12713-002
- - - - -x

Reedsport High School
2260 Longwood Drive
Reedsport, Oregon 97467

Wednesday, April 7, 2010

The above-entitled matter came on for scoping
meeting, pursuant to notice, at 7:10 p.m., Jim Hastreiter,
moderator.

P R O C E E D I N G S

(7:10 p.m.)

MR. HASTREITER: Welcome everyone. Good evening. Thank you for joining us for the public scoping meeting for the Reedsport OPT Wave Park Project, FERC No. P-12713. My name is Jim Hastreiter, and I'm with the Federal Energy Regulatory Commission. I'm a fishery biologist by training, and I'm also the project coordinator for the proposed Reedsport Project.

This meeting, besides serving as FERC's public scoping meeting, is also serving as a public meeting for the Oregon Water Resources Department. So this evening we have Mary Grainey with us with Oregon Water Resources Department participating in this meeting. We also have a court reporter with us this evening making a transcript of the meeting. He's hiding up in back, and he asked that when you do speak, when we get to the comment part of the meeting, that you clearly state your name and your affiliation for the court reporter, and you may even want to spell your name if you have a difficult spelling like I do; and we'll remind you about that later as well.

I'd first like to summarize this evening's agenda for you. We'll have introductions of the folks up here and I'll briefly describe who FERC is and what we do. I'll talk about procedures for this meeting and I'll present a

1 schedule for processing the proposed license application for
2 the Reedsport Project and preparing the environmental
3 document. I'll describe the purpose of scoping, then Mary
4 will make a presentation on the process water resources will
5 us in considering the proposed project. That will be
6 followed by a presentation on the proposed project by Phil
7 Pellegrino with OPT. Phil's over here. And then FERC staff
8 will again take the floor and we'll describe the resources
9 issues we've identified in our scoping document for doing
10 the environmental analysis. And then, at that point we'll
11 begin taking formal comments.

12 So as I said, my name's Jim Hastreiter and I'm
13 with FERC, and I'm in Portland, and with me today are two
14 other FERC staff people, Annie Jones. Annie is with the
15 Office of General Counsel. And Alan Mitchnick over here.
16 Alan's a senior technical expert, and that means that he's
17 forgotten more than I've ever known. Isn't that what it
18 means, Alan? Okay.

19 And then also we have decided for the Reedsport
20 Project to use our contractor that the Commission has, and
21 that contractor is Louis E. Berger & Associates. And
22 they'll be helping us prepare the environmental document.
23 And Fred Winchell is the project coordinator for them that
24 will be working with us. And Fred is going to introduce his
25 folks that are here tonight.

1 MR. WINCHELL: At the back of the room we have
2 Ellen Hall who was signing you in as you came in. She's
3 going to be addressing socioeconomic issues in the EA. We
4 have Eileen McClanahan with Meridian at the right end of the
5 right table. She's going to be addressing marine mammals,
6 reptiles and terrestrial resources. And Jeff Bryce next to
7 her from Meridian will be handling recreational and land
8 use.

9 MR. HASTREITER: And we'll be closely working
10 with Fred's crew in preparing the documents. So who is FERC
11 and what do we do? FERC is an independent federal agency
12 that regulates aspects of most types of energy we have
13 available in the United States. FERC is comprised of five
14 commissioners that are appointed by the President and
15 confirmed by the Senate. The President of the United States
16 designates the chairman of the Commission.

17 The Office of Energy Projects permits and
18 oversees the construction and operation of energy
19 infrastructure necessary for functioning energy projects
20 such as non-federal hydropower, gas projects and oil
21 pipelines. We have three divisions within the office that
22 specifically deal with hydropower. The Division of
23 Hydropower Licensing considers license applications for
24 actual projects. That's the division I work in and Alan
25 works in and Annie works in.

1 We also have the Division of Administration and
2 Compliance, and they're responsible for ensuring that
3 projects are constructed and operated in accordance to their
4 license requirements. And then the third division is our
5 Division of Dam Safety and Inspections. They ensure that
6 dams are safe and public safety is maintained at all
7 licensed projects. FERC's headquarters is located in
8 Washington, D.C., and we have five regional offices with the
9 closest one being Portland and then there's another one on
10 the West Coast in San Francisco.

11 So issued hydropower licenses normally have a
12 term of anywhere from 30 to 50 years, and licensed projects
13 have to best serve the public interest. It's not just a
14 matter of how much energy the projects produce, but we also
15 must take into account environmental concerns and other
16 resource issues in making our decisions. In all, there's
17 about 2,600 projects that have been licensed by FERC across
18 the country.

19 So moving to meeting procedures, we had some
20 handouts when you came in. One is the scoping document and
21 the other is some information on navigating the FERC
22 website, which I'll talk about in a minute. We also have
23 two sign-in sheets, so I hope everybody that is here tonight
24 has signed the actual sign-in sheet so we can keep a record
25 of who's attended. And then the other sheet is for folks

1 that want to make a public comment, and you still have time.
2 You know, you can raise your hand and sign the sheet after
3 if you've been thinking about making a comment, but didn't
4 sign up. So you can still do that later on when we get to
5 that point in the meeting.

6 And as mentioned before, we have a court reporter
7 here tonight and is recording every word we say, and then
8 written transcripts of the meeting will be available and
9 they will be made part of the official record for the
10 proposed Reedsport Project in about two weeks. And if you,
11 for some reason, need the transcripts before then, please
12 see the court reporter after the meeting and for a nominal
13 fee they can provide the transcripts earlier than when
14 they're available on our website.

15 And this is sort of the public outreach part of
16 my presentation. We have an amazing amount of information
17 available at our website, at the FERC website, and that's
18 www.FERC.gov, and we've provided a handout for you to help
19 navigate that and it kind of goes through some of the
20 various functions you can use to find information. And our
21 scoping document also helps you navigate the website.

22 But I did want to mention three of the more
23 useful options that are available on our website. One is
24 called E-Library, and using E-Library you can view any
25 document that was submitted or issued by FERC. So to view

1 any document in the record for the proposed Reedsport
2 Project, you'd go to our website and click on E-Library and
3 there's a space for a docket number and the docket number
4 for the Reedsport Project is P-12713. So you put that
5 number in there and all the documents that have been filed
6 or submitted with the Commission on its record will pop up
7 and you can sort through them and look at various documents.

8 The second useful option is called E-
9 Subscription, and I really like this one because I even use
10 it quite often. And you sign up and register on the site
11 one time, and I'm not sure what all information you have to
12 put in. I think it's your name, and I don't know if there's
13 much beyond that, but when you do that registration one time
14 you'll be automatically notified by email of any particular
15 document that is either submitted to FERC or issued by FERC
16 for a particular docket number. And again, for the
17 Reedsport Project is P-12713.

18 So for instance, you get an email automatically
19 into your email box and it'll have a link and you just click
20 on that link and it'll take you right to the document. So
21 the advantage of that is you don't have to periodically
22 search, if you're interested, for a particular FERC
23 documents on a particular project. It just notifies you
24 automatically and it's a huge timesaver and it's pretty
25 simple to do. So if you do have an interest in following

1 this project, I suggest you do that.

2 And then the third option I wanted to talk about
3 is E-Filing. It's very useful to get put on the mailing
4 list. The scoping document that we had available up here
5 was mailed to everyone on FERC's official mailing list for
6 the Reedsport Project and any future mailings from the
7 Commission will only go to the people on our mailing list.
8 So if you're interested in receiving hard copies of
9 documents that are issued by the Commission or submitted by
10 others -- these are just documents issued by the Commission,
11 I'm sorry, you need to take a look at the back of the
12 scoping document and if your name's not there you need to go
13 ahead and use this E-Filing function and get your name on
14 the mailing list for the Reedsport Project. You can also do
15 that in writing, just send in a letter to the Secretary of
16 the Commission, and I'll show that address just in a bit.

17 I just wanted to briefly go over our preliminary
18 EA preparation schedule, and EA is Environmental Assessment.
19 We've decided on this project to do an environmental
20 assessment. So OPT filed their license application in
21 February and we issued our scoping document March 1st. And
22 today we had the environmental site visit, which was
23 mentioned in our scoping document and in our notice, and
24 then we're having the meeting tonight. And then, we're also
25 having a meeting in Salem tomorrow at 2 p.m.

1 The next step is once we do have an information
2 request out to OTP, asking for particular information that
3 we feel was necessary before we could accept their
4 application, and that information is due in mid-May, and
5 after that, and we review that information. We'll make a
6 decision on issuing a notice that the application is ready
7 for environmental review and analysis. Once that's issued,
8 then there'll be a deadline for filing comments,
9 recommendations and agency terms and conditions and
10 prescriptions in July, and after that time we plan on
11 issuing the environmental assessment sometime in August, and
12 we'll take comments on that environmental assessment, and I
13 believe it's a 60-day comment period, and those should be
14 due in October.

15 But what's important on this list for you all as
16 well is the four bolded timeframes are when we actually take
17 comment on the project to the Commission, so you have four
18 opportunities at four different stages in the process to be
19 involved and make your issues and concerns known.

20 So I just wanted to go over scoping quickly, and
21 that's why we're here this evening. We are here because
22 FERC regulations in an Act called the National Environmental
23 Policy Act and also referred to as NEPA as well other
24 applicable laws require that any federal agency who takes a
25 federal action, and in this case the federal action would be

1 FERC's decision on the proposed Reedsport Project and its
2 application on whether to issue a license or to not issue a
3 license. And in that case, when you have that sort of
4 federal action, the federal agency has to conduct an
5 evaluation of the environmental effects of the proposed
6 project.

7 So we're here tonight for scoping, and scoping is
8 done in the early part of the NEPA process, and that's where
9 we ask members of the public, nongovernmental organizations,
10 state agencies, federal agencies and Native American Indian
11 Tribes to assist us in identifying issues and concerns that
12 should be included in our environmental document for the
13 proposed project.

14 And besides identifying issues and concerns,
15 we're also making a request for information during this
16 scoping meeting. And on page 16 of our scoping document
17 there's a fairly detailed list of the types of information
18 we're interested in receiving. And I just have a general
19 list up here, and again, helping us identify significant
20 environmental issues. And if there's any valuable
21 environmental information from other studies in the project
22 area, we'd like to know about that.

23 If there's any information or data describing
24 past and present conditions in the project area, it would be
25 useful. And if there's any resource plans or comprehensive

1 plans and future proposals in the project areas, we'd also
2 like to know about that.

3 So the information that you all provide to us at
4 this scoping meeting will be made part of the Commission's
5 record for the Reedsports Project. So how do you provide
6 comments? Well, there's four ways to do that. Tonight you
7 give them orally, and again we have a sign-up sheet for
8 folks to sign-up and give oral comment. Or you can do it in
9 writing today. If you decide you don't want to speak, you
10 can hand in written comments to any of us and we'll take
11 them and make sure they get placed on the Commission record.

12 Comments can also be filed electronically with
13 FERC and through that E-Filing function I talked about at
14 the FERC website. It also describes it on page 17 of the
15 scoping document. What you do is you do a Word document,
16 put your comments together and you go to that E-Filing site
17 on our web page and you can just attach your comments and
18 they'll be filed with the Commission.

19 The other thing is you can mail your comments to
20 FERC. But what's most important on this slide is the due
21 date. The comments that are due as a result of this scoping
22 meeting are due May 10th. And if you do decide -- we really
23 encourage folks to use the electronic filing because it
24 saves time and money and paper, but if you do decide you
25 want to submit written comments you have to make sure that

1 the correspondence clearly identifies that this is for the
2 Reedsport Wave Park Project, FERC No. 12713-002 and you send
3 it to the Secretary of the Commission at this address,
4 Kimberly Bose. And all filings that are sent to the
5 Commission, the hard copy, you have to send in an original
6 and eight copies. So there's a benefit there also by E-
7 Filing. You don't have to submit all those copies.

8 So now I'm going to turn it over to Mary Grainey.
9 She's going to talk about her agency's role in reviewing the
10 Reedsport project.

11 MS. GRAINEY: Thank you, Jim. I'm Mary Grainey
12 with the Oregon Water Resources Department, and I'd really
13 like to thank Jim. I think this is one of the first times
14 that we have coordinated a meeting with FERC and we really
15 appreciate being able to share this forum so it makes it
16 more effective for you folks as well for us to be able to
17 collect all the comments at one time.

18 So as you may all know, the Water Resources
19 Department is responsible for determining whether to issue
20 water rights for any beneficial use of water in the State of
21 Oregon, and this would be the first time that we would be
22 considering a hydroelectric water use on the ocean, so we're
23 kind of learning our way through this. And as we go through
24 this there are several other state agencies that are
25 involved in different aspects of managing the resources,

1 either in the oceans or on the beaches, and I'll talk about
2 that a little bit as we go through the presentation.

3 So basically, what we're here to learn about is
4 the Reedsport Wave Energy Project, and the proposed action
5 is to put 10 buoys, installed and maintained off of the
6 coast here, and we're also interested in how to measure the
7 impacts to both the environment and the existing ocean
8 users. The third thing we're interested in is how to reduce
9 and manage those impacts to the environment and to existing
10 ocean users.

11 As many of you are aware, we've been talking
12 about this project for a couple of years already and the
13 state agencies have been working with OPT and talking to
14 them about what do we think might be the impacts to the
15 environment or things that we want to be sure to study to
16 find out if there is a possible impact to the environment.

17 A special legislation was passed, Senate Bill 195
18 in 2009, which exempts this project from the strictest
19 resource standards that are applied to hydroelectric
20 projects, and part of the reason was because it's a small
21 project and we want to be able to find out what is it that
22 we can measure in terms of the impact of the project. So
23 the legislation provided that if there's a settlement
24 agreement signed with the state agencies that provides for
25 collecting and analyzing information to determine the

1 impacts of the project on the environment, on fish and
2 wildlife resources, on commercial fish and recreation and if
3 there is agreement -- part of the settlement agreement would
4 identify measures to prevent or mitigate those impacts then
5 certain standards would not apply that we might apply to a
6 land-based hydroelectric project. So we have been in
7 discussions with OPT about what would need to be measured,
8 how we would do mitigation.

9 If we sign that settlement agreement, it will be
10 filed with FERC on their docket number. If we do not sign
11 that settlement agreement, then we will go through the FERC
12 processes at the time that FERC is asking for comments on
13 the scoping document or on their environmental analysis. We
14 will be providing our comments just as we would if it was
15 any other project. And so you have an opportunity to know
16 where the state agencies are on those issues.

17 So this slide just says that. If there is a
18 settlement agreement, it'll be posted at FERC. You can also
19 leave your name and address with me. I will be taking
20 copies of what FERC has, so I will have the list of
21 attendees here and I can put your names on a mailing list
22 and provide you an email notice or a regular mail notice of
23 that, if you ask for it, otherwise we'll be providing our
24 comments to FERC.

25 I am subscribed to the FERC docket. Any time

1 someone files a comment about this project I do get an email
2 that says "Comment Filed" and I can click on it and I can
3 read it and include that in my record. So we are taking
4 advantage of the fact that we're all interested in pretty
5 much similar information. So we can get the same facts that
6 we're working from here it kind of helps everybody.

7 Water Resources has the responsibility to consult
8 with the other state agencies, and just about every state
9 agency that's involved in natural resources is involved in
10 this project. So we have Chris Stein here from the
11 Department of Environmental Quality tonight. We'll be
12 working with probably several people from the Department of
13 Fish and Wildlife. And the Parks and Recreation Department
14 have responsibility for the beaches -- where the cable
15 crosses the beach and for impacts to recreation. The
16 Department of State Lands has responsibility for leasing the
17 area of the ocean or the land submerged under the ocean out
18 to the 3-mile mark. So they will be working through
19 conditions for OPT for leasing that area of the ocean.
20 They'll also be responsible for remove and fill permits and
21 conditions that have to do with the anchors and stuff, so
22 they will be involved.

23 The Department of Land Conservation and
24 Development have responsibility for commenting to FERC on
25 whether this project meets the Coastal Zone Management Plans

1 and is consistent with the Territorial Sea Plan for the
2 State of Oregon, so we'll be coordinating with them on that.
3 The State Marine Board has responsibility for water safety,
4 Department of Geology and Mineral Industries will be giving
5 us advice on the impacts to the beach, if we think there
6 might be any sediment transport that is different, with or
7 without the bores. And the Department of Energy has kind of
8 general interest in all of these renewable resource
9 projects.

10 So in terms of our processes, we will be making
11 recommendations to FERC for the study plans that are
12 involved in this project and for terms and conditions to be
13 evaluated in the environmental assessment, so they will get
14 formal comments from the State of Oregon on those issues.
15 DEQ will be working on the water quality certification for
16 the project. As I said, Department of Land Conservation
17 Development will be looking at the consistency with the
18 Coastal Zone Management Plan. Water Resources has two
19 proposed orders that they need to prepare, and I'll talk
20 about those in a little more detail next. The Department of
21 State Lands will be working on the lease and the Parks and
22 Recreation will be working on the ocean/shores permit. So
23 there's a lot going on that needs to come together for the
24 project.

25 Water Resources has a two-stage process. One of

1 the things that we have to do is we have to issue an order
2 on the potential for this 10-buoy project to have cumulative
3 impacts with other existing, approved or proposed
4 hydroelectric projects within the same basin. So, this is a
5 little bit different than the way that FERC treats the issue
6 of cumulative impacts. FERC is going to be asking questions
7 about cumulative impacts with any kind of project that is in
8 the vicinity of the Reedsport Project, but Water Resource is
9 only looking at what's the potential it's going to impact
10 with other hydroelectric projects.

11 Right now, I'm assuming that this is the first
12 hydroelectric project in the territory, in the ocean and so
13 I'm likely to put out a proposed order that says there is no
14 potential for cumulative impacts because this is the first
15 project. I'm open to comments on that. You know if you
16 think that's a wrong path to go down, you can say that
17 earlier rather than later. When FERC puts out -- they will
18 put out a summary of this meeting and then they will ask for
19 comments on what terms and conditions should be included in
20 their environmental assessment. At the time that they start
21 talking about their environmental assessment. It's likely
22 that I will be putting out a proposed order saying I don't
23 think there's any potential for cumulative impacts with
24 other hydroelectric projects. And so I will be open to
25 comments on that. It's also open to protests.

1 At the time that FERC completes their
2 environmental assessment and has done a discussion of all
3 the facts about marine mammals and fish and recreation and
4 all of the -- and commercial fishing and everything that
5 goes into the environmental impact review, I will be taking
6 the results of that study and saying this is how Water
7 Resources views all the public interest issues related to
8 the project and whether Water Resources would recommend a
9 water right or not, and the conditions that would go with
10 that water right.

11 So the public interest standards that we look at
12 are the things that are talked about in an environmental
13 assessment -- the fish and wildlife programs, water quality,
14 the habitats, plant resources, land resources, historical,
15 cultural and archeological resources, the safety of the
16 structures and the operations, the economics and the need
17 for power. So all of those kinds of things go into a second
18 proposed order that again is open for comments. It's open
19 for protests and it goes to a contest-a-case hearing. So we
20 will be having another formal, very formal hearing on that
21 and be an opportunity for input from the public.

22 So the benefit of the state project or process is
23 that we have local Oregon management of our state water
24 resources and we try and make it an opportunity to get a
25 forum for local water users and interest groups to provide

1 input into the process. We coordinate our comments and
2 recommendations from all the state agencies together and we
3 try and accomplish it in parallel with the FERC process,
4 using their applications, documents -- their study
5 documents, their environmental assessment documents so that
6 a lot of that doesn't have to be duplicated.

7 So, if you'd like to be added to the email list
8 or provide questions or comments to the state agencies,
9 we're here to listen tonight, and we're open for comments in
10 the future. So again, this is my email address. I've got
11 some handouts if you'd like to have copies of that to take
12 home with you.

13 MR. HASTREITER: Okay, now we're going to turn
14 the floor over to Phil Pellegrino with Ocean Power
15 Technologies, and Phil's going to provide us a description
16 of their proposed projects, project operation and
17 maintenance and environmental measures.

18 MR. PELLEGRINO: Thank you, Jim. Appreciate
19 that. I think run the machine, if that's okay with you.
20 Get a little more interactive with our audience.

21 As Jim indicated, I'm Phil Pellegrino. I'm Vice
22 President of Business Development with Ocean Power
23 Technologies, and I'm privileged to be here this evening to
24 speak with all of you. I'd like to take the opportunity
25 right at the outset of this to introduce my colleague George

1 Wolfe. George, why don't you stand up?

2 George is sort of our walking encyclopedia on
3 this project. He conducted the site review this afternoon
4 and which thanks to the balmy weather in Reedsport and
5 Gardner was fantastic and we took about two or three hours
6 really to show folks around, and we'll be available this
7 evening to answer your questions.

8 I'm going to give you a brief overview of the
9 project. Now the first place to start is the Reedsport OPT
10 Wave Energy Facility, and when you look at one of these
11 power buoys they're very impressive devices. This is a
12 power buoy that's about to be deployed off the coast of
13 Spain. It's considerably smaller than the device that will
14 be deployed here in Oregon. It's a so-called PB40 or a 40-
15 kilowatt device. There is literally about 15 years of
16 intellectual property that has been integrated into this
17 device, and since it needs to operate in what can often be a
18 very hostile marine environment it has to be very sturdy to
19 be survivable for a 25- or a 30-year lifetime that it will
20 spend in the ocean.

21 Now here in Oregon this will be the first
22 multiple device wave energy deployment off the coast. This
23 is a pre-commercial wave energy demonstration. It will
24 establish a launching platform for commercial business
25 activity for our company, not only here in Oregon and in the

1 United States, but throughout the world. At this stage,
2 we're talking about deploying 10 power buoys that have an
3 electrical generating capacity of 1 and 1/2 megawatts and
4 will be capable of producing on an annual basis about 4
5 million kilowatt hours of energy, and all of this will be
6 enough to power about 350 to 400 homes, just to put that in
7 perspective. It's still relatively small, but very
8 important to a commercial launch of this technology.

9 We contemplate very extensive environmental
10 effects studies, which are very important to determine
11 impacts. And very importantly, this is part of a phased,
12 very gradual process. This will not be a snowball rolling
13 down the mountain. It will take time, and it's appropriate
14 that it should take time because there are folks who are
15 concerned about what impacts may follow from this, and we
16 need to understand that very well before we go to a larger
17 scale deployment. We need not only to understand the wave
18 energy benefits, but also the effects. The effects on
19 traditional ocean users like recreational users or
20 fishermen.

21 Now, let's take a look at the project benefits.
22 And what's very important to understand is that this project
23 is going to create jobs. It's going to create jobs in
24 fabrication, assembly and deployment in Oregon and
25 especially, in the coastal communities that need these jobs

1 so desperately where the unemployment rates are now
2 approaching 15 or even 20 percent.

3 Here we have some pictures of the actual
4 fabrication of the first buoy at Oregon Iron Works. We
5 awarded a contract to OIW in December of last year, but
6 there's a million dollars in wages that will directly flow
7 to the southern Oregon coastal communities. Jobs for
8 assembly and deployment, six-family wage jobs will be
9 created, 10 to 12 jobs maintained in things like anchoring,
10 fabrication, mooring and deployment of the power buoy.
11 These will be performed locally where they're needed
12 desperately.

13 There will also be a lot of jobs created for buoy
14 maintenance. Ultimately, this will be 10 buoys. These
15 buoys are maintained on a five-year cycle. So once we get
16 going for the 10-buoy array that means two buoys every year
17 are going to be maintained. We need trained technicians who
18 are local to the area that will be able to conduct this kind
19 of activity. And if, in fact -- okay, it's not determined
20 yet, but if, in fact, the project is to be expanded
21 ultimately to a 50-megawatt project there could be as many
22 as a hundred power buoys in the water. That would mean 20
23 of these buoys would be maintained on an annual basis with
24 the concomitant jobs that go along with that for the
25 maintenance activity.

1 There will be local scientists and researchers
2 that will be employed to study the marine environment and
3 we'll be creating jobs for the manufacture of the smart-pod,
4 sort of the Intel inside the box in New Jersey, which is
5 where our corporate headquarters is, and here we have a
6 picture of what that looks like. It's the control systems
7 and the communications and the electrical generator and what
8 we call the power takeoff system for the device.

9 But ultimately, most of the jobs are going to get
10 created in the State of Oregon where all of the assembly of
11 the power buoy and the ancillary facilities will occur. So
12 the bottom line is these kinds of projects they're good for
13 Oregon and they're good for the United States, and we need
14 to keep more of this technology onshore and we need to keep
15 the jobs that are associated with it right here in the
16 United States where they belong rather than what happened,
17 for example, with the wind industry where most of those jobs
18 went offshore.

19 Now let's look at the wave energy facility and
20 its components, and we'll look at it from a marine side and
21 from a landside. We have here a very simple diagram of the
22 power buoy in the water, and it's been simplified in that it
23 eliminates the mooring quaternary system so that you can see
24 clearly some of the principal components of what comprises
25 the system once it's deployed in the ocean. And the power

1 buoy has a float, and the float is basically moving with
2 respect to a relatively stationary spar. And the way that
3 it moves is that the energy in the ocean waves are
4 transferred to the float and that mechanical energy with the
5 moving float is used to drive an electrical generator that
6 produces the electricity.

7 Another component, a principal component is
8 called the heave plate, and we have an undersea substation
9 that is an electrical integration point for the device where
10 we have what we call pigtails that come from the device,
11 which are electrical cables that tie into that substations
12 and there'll be cables from other power buoys that form the
13 10-buoy array. And then there'll be a cable to the shore
14 that ultimately integrates the array into the electrical
15 power grid and delivers the electricity to consumers.

16 So 10 power buoys of a PB-150 power buoy design,
17 that's 150 kilowatts for each power buoy, the associated
18 mooring system and the anchors, the underwater substation
19 pod, which is pictured ready to be deployed and this will be
20 installed on the sea floor, the transmission cable to shore
21 and on the land side we'll be using an existing effluent
22 pipeline as a conduit for the electrical cable that ties
23 ultimately into the power grid.

24 We'll be using existing under-utilized industrial
25 property. It's no secret that there's been a decline in

1 traditional industry in the south coastal communities and we
2 have a lot of property and electrical infrastructure that's
3 under-utilized that can now be put to good use for this new
4 technology that will generate electricity in a green manner.

5 If we look at the project overview, we have the
6 array, which is roughly about 2.8 miles off the coast, and
7 it will be deployed in about 190 feet of water. We've moved
8 it out further to reduce some of the potential impacts and
9 we have the existing outfall from the effluent pipeline,
10 which is about a half mile off the coast to which the
11 undersea cable will link and be used as a conduit so that we
12 don't have to disturb the beach front. And then that will
13 reach a point of demarcation, where there's a transition to
14 an underground residential distribution cable that
15 ultimately ties into a grid connection at the shore station,
16 which is the Gardner substation operated by the Bonneville
17 Power Administration.

18 The FERC boundary for the project is much larger
19 than the actual array. It's about 1 mile wide by about 2
20 and 1/2 miles long. The actual array occupies about 800 by
21 about 800 meters or about 30 acres in the ocean.

22 Here we have a dimension drawing of the power
23 buoy. The power buoy will be about 115 feet tall by about
24 35 feet wide. It weighs about 250 tons. So if there's any
25 doubt about how sturdy and survivable this is, there

1 shouldn't be. And there'll be about 30 feet of the array
2 that will be above the ocean surface. The remainder of it
3 will be below the waves, and the visual impact of this at 2
4 and 1/2 miles off the coast will be virtually nil. We have
5 some pictures here of the float on this device being
6 fabricated at Oregon Iron Works as we speak.

7 Now let's talk a little bit about effects
8 evaluations. There's 18 studies, evaluations or assessments
9 that will be an integral part of this project that will
10 study all aspects of wave energy. There's an adaptive
11 management plan that's part of the settlement agreement that
12 was referred to earlier. And there are six primary study
13 areas in aquatics and water resources, and they include
14 substations or whales and associated acoustical studies,
15 pinnipeds, which include seals and walruses, fish and
16 invertebrates, avian birds, wave current and sediment and
17 finally, EMF or electromagnetic fields.

18 Obviously, there's going to be a very, very
19 strong and appropriately so environmental focus for this
20 project. They'll be five years of evaluation in the
21 environmental studies that are contemplated so that we won't
22 miss a trick, hopefully, as we study what potential impacts
23 may occur as a result of this deployment. There are
24 additional studies that are contemplated on crabbing and
25 fishing, recreational use and cultural impacts. And all of

1 this is designed to apply knowledge to future phases, which
2 ultimately could lead, not necessarily will lead to a
3 commercial-scale project.

4 And if we look at the process steps, there are
5 numerous federal and state license, permits, and
6 authorizations which the other speakers have already spoken
7 to. There are multiple opportunities for involvement on the
8 part of the public, nongovernmental organizations, and the
9 interested stakeholders. There have been studies now that
10 have been developed over a three-year process that we've
11 been engaged in to date. There are state, federal, and
12 private interests, including fishing and recreation that
13 have participated. There's the settlement agreement among
14 the stakeholders that really forms the basis for conducting
15 the environmental studies in the adaptive management plan,
16 which will provide a basis for making changes, if they're
17 needed, to the way the project operates. And this is a
18 highly collaborative, very consultative process. No one
19 party leads this process, especially not Ocean Power
20 Technologies.

21 Modifications will be based on study results or
22 any new information that becomes available and the results,
23 very importantly, will be shared in an open, transparent
24 process.

25 The next phase of the meeting I'm going to turn

1 it back to Jim Hastreiter. You have additional information
2 here, along with information that's already been provided in
3 terms of how to reach Ocean Power Technologies or our
4 Reedsport OPT Wave Park, LLC directly, which will be the
5 owner of the project, and we encourage you to use that.
6 It's open. It's transparent. And we want to make sure that
7 the public and the stakeholders and everyone else involved
8 in this project has the information that they will need
9 because truly ignorance is not bliss. It's best that we be
10 informed and we are educated.

11 I want to thank you very much for your time and
12 attention, and we look forward to your comments. Thank you
13 very much.

14 MR. HASTREITER: All right, Fred Winchell, the
15 project coordinator for our contractor for the Commission
16 will now discuss the issues that we've identified and are
17 listed in the scoping document.

18 MR. WINCHELL: I'm going to be giving a rundown
19 of the full listing of issues that we've identified that we
20 intend to address in the environmental assessment and
21 they're all also listed in the scoping document.

22 As Jim noted, one of the purposes of scoping is
23 for us to make sure that we identify all of the key issues
24 that need to be addressed in the environmental assessment.
25 So if you know of any that you don't see listed in the

1 scoping document, it's important that you provide them in
2 your comments, along with any additional information beyond
3 what OPT has already filed with their license application
4 that we should be considering in our analysis of the
5 environmental effects.

6 On this screen we have the resource areas that
7 we've identified to date that we believe have the potential
8 to be cumulative affected by the effects of the project in
9 conjunction with other past, present or ongoing projects or
10 actions, and that can include future or other wave park
11 generating projects. The issues we've identified to date
12 include sediment transport, effects on marine life and
13 birds, on recreation, and on commercial fishing and
14 crabbing.

15 We also list in the scoping document a number of
16 site-specific resource issues in a number of categories, and
17 I'm going to go through the issues within each of the
18 resource areas. These next two slides are just a summary of
19 the overall resource areas that we'd be addressing.

20 In the area of geological and soil resources,
21 we're going to be looking at the effects of changes in wave
22 energy on sediment transport processes, and that would
23 include and encompass effects on beach erosion, on sediment
24 deposition, changing the depth of the water in the near
25 shore area.

1 We'll also be looking in the water resources area
2 at effects of aquatic growths on mooring lines, on water
3 quality. There's a potential concern there if there's very
4 large growth on the mooring lines that when that falls to
5 the ocean floor, say after a storm, that a decomposition
6 could cause low dissolve oxygen levels. We'll also be
7 looking at effects of the installation of the anchor and
8 cable on water quality, including sediment resuspension,
9 effects of antifouling paint and the coatings that would be
10 used on the buoys and on the mooring floats on water quality
11 and aquatic biota, and the potential affects of spills and
12 hydraulic oil on water quality, and this is recognizing that
13 they have a number of plans proposed in place to address and
14 minimize the potential affects of spills.

15 Within the field of aquatic resources, we'll be
16 looking at effects of electromagnetic fields on aquatic
17 resources and that would include marine mammals and
18 Dungeness crabs. We'll also be looking at the attraction of
19 predators and any effects of predation of anadromus fish in
20 the area. We'll be looking at effects on species
21 composition and interactions as a result of attraction to
22 the project structures, and that would include both fish and
23 crabs, affects on underwater noise and vibration on fish and
24 also on marine mammals, affects of alteration of seabed
25 habitat and affects of the installation process and also

1 affects of the changes in wave energy on the littoral and
2 near or shallow water and shoreline habitat.

3 In the area of marine mammals, reptiles and
4 birds, in addition to effects of EMF and noise on marine
5 mammals, we'll be looking at potential for whale injury or
6 entanglement and effects on migration, potential use of
7 buoys as haul-outs by sea lions and seals, and the potential
8 for offshore birds to collide and cause mortality for
9 collision of the buoys, which is primarily a concern during
10 nighttime.

11 In the area of terrestrial resources, we've
12 identified the issue of effects of changes in sediment
13 transport and erosion on beaches that are used by western
14 snowy clover buffer for nesting. There are limited other
15 potential effects on terrestrial resources due to the plan
16 to route the cable within the effluent pipe throughout the
17 entire terrestrial portion of the transmission cable.

18 There are quite a number of federally listed
19 species that have the potential to be affected by the
20 project. This includes a number of marine mammals,
21 including whales, some reptiles, some of the marine turtles
22 and birds and a number of fish species, including most of
23 the salmon species that would be in the project area. We'd
24 also be looking at the affects of construction operation and
25 maintenance of the project on essential fish habitat, which

1 is a classification, that NEPF's uses for habitats important
2 to commercial species.

3 In the area of recreation, ocean use and land
4 use, we'll be looking at effects of the proposed navigation
5 exclusion zone and that would be for effects on recreational
6 fishing, on commercial crabbing and fishing. We'll also be
7 looking at affects of lost gear on the commercial crabbing
8 and fishing industry, and also effects of wave attenuation
9 on surfing opportunities.

10 In the area of esthetics and socioeconomic
11 resources for esthetics we'll be looking at affects of buoys
12 and associated navigation lighting on esthetics as viewed
13 primarily from the shore. And in the area of socioeconomic
14 resources, we'll be looking at the effects of the projects
15 on local, Tribal and regional economies.

16 And finally, I believe for the cultural
17 resources, we'll be looking at potential affects of
18 construction and operation on historical and archeological
19 traditional resources that may be eligible for inclusion in
20 the National Register of Historic Places. But again,
21 routing the cable through the effluent pipe greatly reduces
22 potential affects in this area in the terrestrial part of
23 the project.

24 And now this is the time when we open the meeting
25 for public comments. I think we have four people who've

1 indicated an interest in speaking, but certainly, we have
2 time to accommodate more if anyone is inspired.

3 When we call your name or when you want to make a
4 comment, please make sure you use the microphone for the
5 benefit of the court reporter, and also please provide your
6 name, including the spelling of the last name before you
7 start making your comments. And if you haven't already,
8 please fill out the registration form. We'd like to have a
9 record of everyone who's attended the meeting.

10 The first person I have on the list who was
11 interested in speaking tonight is Nick Furman. Is Nick
12 here? Would you like for me to bring the mike to you or do
13 you want to come down here?

14 MR. FURMAN: First up, first home, right, Jim?
15 Is that how that works? Great. George said he was buying
16 the beer tonight, I think.

17 For the record, my name is Nick Furman,
18 F-U-R-M-A-N. I'm the executive director of the Oregon
19 Dungeness Crab Commission, an industry-funded commodity
20 commission that operates under the umbrella of the Oregon
21 Department of Agriculture. And for tonight's meeting I am
22 the chairman of SOORC, Southern Oregon Ocean Resource
23 Coalition. It's one of the six ocean user groups that's
24 sprung up in the last two years in response to potential
25 development in Oregon's territorial sea.

1 Now I'd like to preface my comments to both
2 entities and agencies and the public tonight by saying that
3 the fishing industry groups that I represent are not opposed
4 to the development of sustainable energy from waves or from
5 any other source. As far as we're concerned the debate is
6 about -- not about -- excuse me, not about wave energy.
7 It's about how wave energy is developed on the Oregon coast,
8 the pace in which wave energy is developed on the Oregon
9 coast, and most importantly, where wave energy is developed
10 in Oregon's territorial sea. That age-old location,
11 location, location.

12 With that in mind, SOORC is party to the
13 settlement agreement associated with the project being
14 discussed tonight. We've agreed to sign that document after
15 lots of discussion and consideration because we feel it's
16 the best way to stay engaged in the project and be part of
17 the all-important adaptive management process. We also feel
18 that it's an opportunity to be able to review the results of
19 the associated studies that have been discussed tonight by
20 the earlier presenters and filter them through a perspective
21 which may be different from some of the other parties of
22 that settlement agreement.

23 We will admit that we have significant concerns,
24 concerns about impacts to sensitive marine habitat, concerns
25 about removal of productive fishing grounds, concerns about

1 size and composition of the anchoring devices and very much
2 so concerns about the ability to develop a suitable removal
3 plan should wave energy not prove feasible from study
4 projects like this. But that said, we recognize that the
5 only way that any of us are going to be able to find out
6 about the impacts of wave energy projects, if there are
7 impacts, and if wave energy is a good fit to the Oregon
8 coast is to put some buoys in the water, and that's why
9 we're a part of that project.

10 I'd like to make it clear before adding a few
11 more comments that are participation in the settlement
12 agreement on this 10-buoy project should be in no way
13 considered as an endorsement of a full build out at that
14 site, as what's being considered with the application
15 process in subsequent phases. The Southern Oregon Ocean
16 Resource Coalition participated in a fisheries uses and
17 values mapping project over the last 12 months in
18 association with the Territorial Sea Plan, Part 5 amendment
19 process. We think that the result of that mapping effort
20 clearly shows that neither of the two sites being considered
21 on the southern Oregon coast will meet the task established
22 in Part 5 for anything beyond small demonstration project
23 like what are being discussed and considered tonight, both,
24 unfortunately, are in the middle of the most productive and
25 economically important fishing grounds in this area.

1 SOORC also recognizes that being part of that
2 territorial sea amendment process with Part 5 that there are
3 two parts to that and I'll read just briefly from that
4 document which says, "The requirements of Part 5 are
5 intended to protect areas important to renewable marine
6 resources, ecosystem integrity, marine habitat and areas
7 important to fisheries from the potential adverse affects of
8 renewable energy siting, development and operation and
9 decommissioning."

10 But what we are also aware of is that the rest of
11 that paragraph says, "And to identify the appropriate
12 locations for that development, which minimize the potential
13 and adverse impacts to existing ocean resource users and
14 coastal communities," and we're committed to that process,
15 trying to protect areas that are important to fisheries, but
16 also trying to work with the developers and the state to try
17 to find areas and identify the appropriate locations for
18 wave energy siting along the Oregon coast.

19 I want to say to both entities and agencies here
20 tonight, both to FERC and to the state, we are putting a lot
21 of faith in MOU between FERC and the State of Oregon, which
22 states that FERC will consider this territorial sea process,
23 Part 5 amendment in the permitting decisions. And we're
24 also putting a tremendous amount of faith and getting a
25 tremendous amount of comfort from a letter that we recently

1 received from the governor's office, which states, and if I
2 can read one more paragraph, dated March 11th, "I want to
3 reassure you that any project expansion beyond these 10
4 buoys must conform to the standards adopted in November as
5 Part 5 of the Territorial Sea Plan, through a memorandum of
6 understanding signed with state agencies in 2008, FERC
7 agreed to consider Oregon's plan in making siting decisions.
8 Therefore, in addition to any build out at Reedsport, future
9 projects would be considered by FERC in the context of the
10 updated Territorial Sea Plan," which we're so heavily
11 involved in. We really appreciate that. We take tremendous
12 comfort in that as this process moves forward.

13 And off the record, as someone who was born in
14 New York City and lived there for my first five years, I'm
15 just worried that if I spend too much more time around
16 George and Phil, you's guys, that I'm going to be saying
17 encyclopedia like Phil does shortly. So keep me from doing
18 that, folks. I appreciate it. Thank you very much.

19 MR. WINCHELL: The next speaker we have on the
20 list is Theresa Hart.

21 MS. HART: Thank you. My name is Theresa Hart
22 and I am the president of Lower Umpqua Economic Development
23 Forum. My last name -- the spelling of my last name is H-A-
24 R-T.

25 The Forum is in support of this project. We feel

1 that it is a good opportunity for new jobs to come to this
2 area, and we are very excited about those possibilities. We
3 also feel that the crabbing and fishing industry and this
4 project can co-exist, however more work needs to be done in
5 order to secure the habitats for fishing and crabbing, but
6 we are confident that that can be accomplished and the work
7 that OPT has done in the last couple of years to try and
8 mitigate their concerns really heartens and we feel that
9 this project is a good one and that whatever we can do to
10 help support this project we are there at the table to do.
11 And so we thank you for this opportunity to come and speak
12 and to learn more about this project and to let you know
13 that the businesses in our area, the governmental agencies
14 that we all are a member of this nonprofit organization, we
15 would like to see this project happen, but we also know that
16 it has to coexist with the fishing and crabbing industry,
17 and we're looking forward to seeing how all of that is going
18 to be worked out.

19 Thank you for the opportunity to speak.

20 MR. WINCHELL: It looks like next up is Ike
21 Launstein.

22 MR. LAUNSTEIN: Launstein.

23 MR. WINCHELL: Launstein. Sorry about that.

24 MR. LAUNSTEIN: My name is Ike Launstein,
25 Launstein is L-A-U-N-S-T-E-I-N. I'm here representing two

1 different groups. First off, I'm the superintendent of
2 Reedsport School District, and I welcome everyone to the
3 school facilities this evening. We're glad to have you make
4 use of it.

5 The main reason I'm here this evening, though, is
6 as a member of the Lower Umquia Economic Development Forum.
7 I've been involved in the Economic Development Forum now for
8 a number of years. Significant issue for this community as
9 well as many other communities on the Oregon coast is
10 employment. The Reedsport School District has lost students
11 every year for better than the last 25 years. It's a
12 wonderful place to live if you can find a job. So I'm here
13 this evening to say we need jobs. We want to move forward
14 with this. We certainly want to watch the studies and weigh
15 all of the options and look carefully, but we need jobs.

16 Mr. Pellegrino, we would like very much to work
17 with you as a school district. We'd like to train young
18 people to be employed in this industry, and we see this as
19 an initial step. I know that we're not looking at a great
20 number of jobs here, but hopefully, this is a catalyst that
21 will roll out in an area -- you know, when we're looking at
22 green energy, hopefully, there is a tremendous future and
23 we'd like to have our young people have the opportunity to
24 stay in this community and have good employment. Thank you
25 very much.

1 MR. WINCHELL: Next we have Aaron Blackman.

2 MR. BLACKMAN: Thank you. It's Aaron Blackman,
3 B-L-A-C-K-M-A-N. I'm a resident here in Reedsport. The
4 biggest concern towards wave energy is, is this just a
5 creative green way to produce energy, or is this an
6 innovative way to create green energy? If it's innovative
7 and is truly a step forward, I think it's important to take
8 a step back and look at the scale and see what the long-term
9 ramifications or goals are from this.

10 They're looking at using 30 acres to produce 1.5
11 megawatts. I heard talk of expanding that out to 50
12 megawatts. To put that into perspective, if their numbers
13 hold up, Bonneville Dam, one of several dams on the
14 Columbia River is 1 gigawatt. To produce that kind of
15 energy with this innovative green energy technique, you're
16 looking at 30,000 acres and I would question where you're
17 going to put that many buoys as a sustainable energy source.

18 That was pretty much my only concern. You know,
19 and if it's creative, let's be completely honest and say,
20 hey, this is a fun way to make energy, but let people know
21 that long-term this may not go anywhere. Thank you.

22 MR. WINCHELL: The last person we have signed up
23 is John Lavrakas.

24 MR. LAVRAKAS: I'm John Lavrakas. That's
25 L-A-V-R-A-K-A-S. I'm president of Advanced Resource

1 Corporation out of Newport. We just completed a
2 infrastructure assessment for the Oregon Wave Energy Trust,
3 and in it -- well, first of all, let me say I certainly
4 support the work you're doing and appreciate the efforts
5 that OPT is making and all of the people here to
6 collaborate, work together for this to be successful, and
7 I'm very committed to seeing it successful, so I appreciate
8 all this work.

9 That said, in our assessment, as we talked with
10 the developers on what the needs were and looked at our
11 infrastructure capability, there were two issues I'd like to
12 bring to your attention so that you could address them. One
13 has to do with -- well, it basically has to do with where
14 things don't work out the way we expect. One is if there's
15 emergency situations and the other is if devices fail and
16 have to be recovered, such as we had in Newport several
17 years ago where a device went to the bottom and they were
18 able to bring it up and remove it, so that's good. So I
19 would just like to recommend that appropriate contingency
20 planning take place in the area of safety to make sure that
21 if any individual or marine mammal or whatever were to come
22 entangled in the gear, if the device were to break free and
23 come ashore, if there's any safety issue that there's
24 adequate contingency plans in coordination with public
25 authorities on that.

1 With respect to recovery, if any device were to
2 fail or if the project were to be deemed not any longer in
3 the interest of OPT for any reason that there would be
4 processes in place to recover the devices that would have
5 been in place. Those are my comments.

6 MR. HASTREITER: That's it for people who had
7 signed up. Is there anyone who's decided they'd like to
8 speak?

9 (No response.)

10 MR. WINCHELL: Last call.

11 (Laughter.)

12 MR. HASTREITER: All right. Well, I thank both
13 Mary Graine with the Oregon Water Resources Department, and
14 I really appreciate the time you've taken out tonight to
15 come and listen about this proposed project, and we
16 appreciate the comments we received. I also want to make a
17 heartfelt thank you to Keith Tymchuk making this wonderful
18 facility available. It's just a tremendous facility for
19 your community and we appreciate you letting us use it,
20 Keith. Thank you very much.

21 So I think with that our scoping meeting is
22 coming to an end. Thank you very much.

23 (Whereupon, at 8:25 p.m., the above-entitled
24 scoping meeting was concluded.)