PORT ANGELES/JUAN de FUCA TRANSMISSION PROJECT

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A P P E A R A N C E S

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MR. KORSNESS: Thanks for coming this afternoon. My name is Mark Korsness and I work for Bonneville Power. And I'll help guide you through this process. Today we're here to make ourselves available to the public and collect any comments you might have or questions you might have about this project and make sure that we answer those in the Environmental Impact Statement for this project. So I'll just take a couple minutes to go through highlights of the project and process here and then give you all an opportunity to ask questions or make comments.

So as most of you are aware, Sea Breeze Olympic converter is proposing to construct an electrical transmission cable across the Strait of Juan de Fuca and from Vancouver Island, BC, to Port Angeles, Washington. The cable would be direct current and would be capable of carrying 550 megawatts of electricity. Sea Breeze would sell a capacity of the cable to interested utilities or power generators. And the description of the project most of you have a basic understanding of. The Office of Electricity Delivery and Energy Reliability, which is a part of the Department of Energy, has received a request from Sea Breeze for a presidential permit for the transmission cable to cross the international border. The Office of

Electricity may issue a presidential permit if the proposal is in the public interest considering environmental electricity impacts.

Bonneville Power has received a request from Sea Breeze to connect the proposed transmission cable to the federal transmission system. BPA allows eligible customers interconnection to the federal transmission system subject to reliability requirements and environmental review. The proposed schedule is that we are taking comments tonight at this public meeting and the draft EIS is out now for comment. We'll be accepting comments through April 24th of this year. And we're scheduled to complete the final EIS this fall. And then Bonneville and the Office of Electricity and Department of Energy will be making decisions based on that EIS. And Bonneville specifically would be making a decision whether to allow interconnection or not. So the reason, again, why we're here tonight is to allow you a chance to comment and ask questions. We're in the one-hour period now between 5:30 and 6:30 where we will have a court reporter recording anything that's said to make sure that we have an accurate accounting of it. And we'll address all issues brought to us in the EIS. So would anyone like to make a comment or ask a question?

MR. GRAHAM: How many volts?
MR. KORSNESS: How many volts in the cable?
MR. GRAHAM: Yeah.
MR. KORSNESS: So how many volts will be -- see, there's two parts. There's the direct current cable and there's the AC cable.
MR. GRAHAM: Direct current cable?
MR. KORSNESS: Mike?
MR. WISE: 150 kilowatt volts.
MR. GRAHAM: Is there going to be a priority of who gets power? Are there priorities involved?
MR. KORSNESS: I'll try to answer that in a general way. This is a company that will build a cable and hopes to sell capacity across it. It's not -- Bonneville Power serves the power needs of the Port Angeles area, so it is not an attempt to provide power to the local utilities or local customers.
MR. GRAHAM: So it is for Vancouver Island or --
MR. KORSNESS: Yeah. The ultimate use of the cable really is unknown at this time. It depends on Sea Breeze, the owner, selling capacity to whoever may want to use the cable. So the ultimate use

I don't think is known yet. And unless you can add anything to that.

MR. WISE: Essentially the easiest way to envision it perhaps is a bridge and that we're simply building the bridge and people would go from south to north or north to south, wherever, and really it is between the supplier of the electricity and the customer that would determine where the electricity is going.

MR. KORSNESS: So we'll try to answer that even more completely in the document. That's a good question.

MS. ASGHARIAN: Are we heading on the right track of what you're asking?

MR. GRAHAM: Sort of. And what I'm looking at theoretically it is like your power drums in a river, basically the river flows are what they are now and 20 years from now are they going to be the same, are they going to be reduced. Are they going to be increased. Who knows. That's why I'm interested. Who are the priority customers and basically what you said is, you know, Washington may come first.

MR. KORSNESS: For this bridge it's whoever is willing to pay Sea Breeze the negotiated amount for capacity on that bridge.

DR. PELL: I'm Dr. Jerry Pell with the Department of Energy, the other Washington, the one on the East Coast. Let me just mention, because it is important that you understand, this is not a Department of Energy project. It is a private sector project by the Sea Breeze Company. And they are the ones who think that it is in their financial interest to build this plant (sic) and sell power over it to the extent that they succeed or fail, how well the company will do. All they are doing is using Bonneville's facility for that purpose because they are crossing the border into Canada it invokes my office in D.C. for the presidential permits, but it's not a federally determined project. It's not a federally designed project. There's no federal stake in the outcome. I just wanted to make sure you all understand that. It is not the Department of Energy that's designing or implementing this project.

MR. KORSNESS: So we're probably starting off a little formal here. I just invite everybody to feel free to make comments or ask questions.

MS. LAWSON: Aleilah, A-l-e-i-l-a-h, Lawson. So in some kind of future scenario where perhaps power from the river does become maybe a more

limited commodity, is Washington State the priority before these things get sold off to private entities?

MR. KORSNESS: Okay. That's a good question.

MS. LAWSON: Going to other states or other countries?

MR. KORSNESS: The federal transmission system is a complicated one. And I have a very small part of it. It's a system of transmission lines or grid and BPA owns a good portion of the grid in the Pacific Northwest and we are charged with transmitting power from the federal dams to whoever wants to buy it. And also, we make the system available to others who either generate power or want to transmit power across the grid. And based on available capacity we allow that and charge them a rate to do that. Sea Breeze right now is just asking for the permission to hook up to our system. So that's the decision we'll make this fall, whether to allow that or not. And then at a later date either Sea Breeze or other entities that will purchase capacity across the cable will actually ask for permission from Bonneville to transmit across the federal system to get to some other use, so that will be a later request and a later decision Bonneville will have to make. This really just creates an

additional path for commercial use. It right now has no effect on the federal system or buyers and users as it is set up right now. But others will perhaps answer that more eloquently than I just did.

MS. LAWSON: Okay.

MR. VOIGHT: Gene Voight (phonetic). I was just wondering, will the system as it is installed be able to convert to AC from Bonneville and sell power through the DC line back to Canada?

MR. KORSNESS: Yeah, it will be able -- that's a good question. It will be able to -- the pathway can send power either to the north or to the south. So from whatever source it comes from the south it will go across, if it happens across BPA lines to get to this converter station. Sea Breeze will convert it to DC and charge a rate to go across the submarine cable and then on the other side convert it to AC and send it to wherever the customer is, and vice versa, if it goes north to south.

MR. VOIGHT: And actually, having this thing go through will improve the local reliability because you'll be able to do some switching if Bonneville went down, Portland, whatever, went down outside of our area and caused, you know, an outage here, could we take power from Canada and heat up the

Peninsula, technically?

MR. KORSNESS: That's a good question. I guess I don't know the -- maybe I don't know all the answers to that. In the short term, this is not a project that Bonneville is seeking to improve its reliability or to provide power for any of its customers, so there is no immediate benefit in that regard. It does expand, it provides another pathway, whether ultimately or how the pathway is used I don't know.

MR. VOIGHT: It provides another source of power other than Bonneville for our local?

MR. KORSNESS: Yeah. Maybe it provides another pathway from Canada to the federal system. The ultimate impact may or may not through your -- the benefit you state there.

MR. VOIGHT: It would depend on maybe Clallum County PUD if they switch power.

MR. KORSNESS: Well, yeah, it goes under the federal system. So yeah, somebody in Bonneville will answer that in the EIS.

MR. WISE: Mike Wise, W-i-s-e, with Sea Breeze, if I may just add. One of the great things about this technology is it has black start capability. This was demonstrated in the crosstown cabling in New

York when the East Coast blackout occurred. The crosstown cable, which is the same technology that we're proposing to use, that part of the East Coast was able to get back up and functioning much quicker than -- in fact, I'd have to check my notes, but I think it was something like 20 hours earlier than the rest of the grid surrounding it. And it is because of the converter stations for this particular type of technology. So that is certainly a benefit in the scenario if transmission lines were to go down and due to an emergency power was necessary the grid could be back up and running due to this technology.

MR. KORSNESS: Although BPA has no plans to purchase capacity on it, off the new cable. Other questions or comments?

MR. BUTLER: Greg Butler, B-u-t-l-e-r, what criteria exactly is Bonneville and the Department of Energy utilizing in order to evaluate whether or not this project is worthwhile?

MR. KORSNESS: Bonneville will not determine whether the project is worthwhile or not. Bonneville will determine whether to allow interconnection to the federal system or not. And that's based on a number of things, probably mainly is the environmental impact and impact to our system

reliability.

MR. BUTLER: Does it depend upon the number of customers for like firm, committed capacity?

MR. KORSNESS: (Nods head).

MR. BUTLER: No. Pretty much environmental?

MR. KORSNESS: It is just if somebody wants to hook up to us, the federal system, we need to allow that unless we find good reason not to. And usually the two most common reasons we would deny somebody hooking up is either because we think the impacts are great and we don't want to facilitate those or the customer and system that wants to hook up would have an adverse impact operationally to our system. So we wouldn't want to jeopardize our reliability. And again, no one has asked to transmit anything yet, which would be a later request.

MR. BUTLER: Will Sea Breeze be part of helping out as far as the relaying upgrades that are required from here to Olympia? Or that's probably not a part of this whole contract yet.

MR. KORSNESS: Sea Breeze will reimburse Bonneville for any costs associated with improvements we need to make either in relays or yard expansion or whatever to allow the hookup excluding those that can

be considered network improvements that others would benefit from. And there's a process that I wouldn't be able to describe fully to determine that. So some costs Sea Breeze will pay for directly, other costs BPA and the rate payers will pay for because there's other benefit. Again, those -- nobody's asked to transmit anything across our system. So there are no improvements planned for past Port Angeles to provide --

DR. PELL: Let me add to that. If Sea Breeze wishes to send power out of the United States into Canada they would have to come back to my office, the presidential permit office, to get an amendment to their permit to allow them to do that. They can't do that absent an amended permit. And one of the issues we look at is, as Mark has said repeatedly, is reliability on the grid. And if that proposal would affect the reliability negatively, the presidential permit would be denied. So there's no potential for negative impact for reliability. The Bonneville grid --

MS. LAWSON: That's an amendment to --

DR. PELL: To the presidential permit.

MS. LAWSON: That's already been issued?

DR. PELL: That they are applying to

have permission to cross the border, that decision will be made by Bonneville. These two applications are taking place in parallel and that's why our two offices are working together so the environmental impact studies -- we're both going to use our studies to make our own decisions. And they need -- both conditions have to be confirmed for the project to go forward.

MR. KORSNESS: It is kind of complicated. I have trouble understanding it myself.

MS. LAWSON: I'm kind of left with this feeling here that -- I mean, it is talking about there is no -- I can't remember exactly what your wording was. But, you know, like it is just laying a cable out in the Sound or in the Strait because something might happen some time. And, you know, is it worth doing all of that to the environment of the Sound because something might happen some time in the future.

MR. KORSNESS: Yeah, that's a good question. Again, it is commercial interest that's proposing the construction of the project. And again, Bonneville will consider the environmental impacts in the United States and decide whether we think they can be adequately addressed or not. And if they can that part of the decision would be taken care of. If we feel they can't then we wouldn't allow the

interconnection.

DR. PELL: I would pick up where Mark left off. What we really need from you folks not just tonight, until the comment period closes on the 24th, is for you to review the documents in terms of how we answer the environmental impact. If you think we missed something this is the time to let us know because on the basis of what we learn from this analysis plus whatever feedback we get from the public, we'll make our ultimate decisions. The major reason that we're here is to get your input on the EIS that hopefully you've all read back to back.

MR. KORSNESS: For example, noise, if you're concerned about noise you need to tell us that, where do you live or where you're concerned about noise. It doesn't have to be where you live and we'll try to make sure we show the impacts in this document. And that will inform you and help us decide whether those can be mitigated adequately or not. So we're interested not only how you feel about the project but what other areas you want us to study to make sure we cover. So other questions or comments?

MR. GRAHAM: John Graham (phonetic). I'm ignorant of construction, especially for a cable. But where that line crosses I'm concerned about the

pulp mill. I have been intimately acquainted with it for a number of years and I live fairly close to the site. And I'm interested how deep that cable's going to go, where it crosses that site because that place is ugly and has -- and it's been ugly for as long as I have been alive. Toxically it is a nasty place. And they are going to dig a hole through it. How deep is the hole going to be?

MR. KORSNESS: Yeah. Do we have charts that show that?

MR. WISE: I think what we're planning to do here is called horizontal directional drilling. We're not actually digging a trench, per se, for that part of the project. We're actually drilling underneath the site. And we plan to be in bedrock through there. So in actual fact, we're going to be -- I think our design depth is roughly 60 feet in through there, 60 feet, that's well below depth of contamination.

MR. GRAHAM: I don't think anybody really knows.

MR. WISE: Well, that's, again, this is what we have seen in the studies. And we will be doing some geotechnical drilling to look closer at this to ensure that we are in bedrock below that site. That's

a design requirement for the horizontal direct drilling work.

MR. KORSNESS: So yeah, from up on top of the hill here, then drill underground and not come out until --

MR. GRAHAM: It has to be to come out and be all right.

MR. KORSNESS: So the soils, those get pumped back up to the surface here?

MR. WISE: That's correct. The drill cuttings get pumped up into a mud tank and then they are put into trucks and hauled off site.

MR. VOIGHT: Hire union workers?

MR. WISE: That decision hasn't been made yet. Yes, we're still contemplating that as part of the project plan.

MS. LAWSON: Where is that drill construction site?

MR. KORSNESS: On Liberty Street between Georgiana and Caroline Street.

MS. LAWSON: That would be where we live.

MR. KORSNESS: So that schedule of that operation would take about --

MR. WISE: About 25 days, something like

that. So certainly we should talk after the meeting and I can go through some of the specifics with you.

MS. LAWSON: Okay.

MR. KORSNESS: Other questions or comments? Things you don't understand about the project or things we should be considering?

Let me ask this: What are you going to ask me to say, okay, we're done with the formal process?

MS. LAWSON: Well, I feel a little constrained in my question-asking because I feel like I'm supposed to have read this environmental impact statement and that I should be asking questions about --

DR. PELL: You mean you're admitting you didn't read it?

MS. LAWSON: No, I didn't read it.

MR. KORSNESS: Don't hesitate to ask questions even if you think they are covered already.

MS. LAWSON: Well, I am concerned about noise locally, certainly with the construction itself, but also with the marine life, the impact on the marine life of digging a trench for 10.5 miles, that's got to have some impact there. And thinking about migration routes for the whales and other sonar animals out there that is going to potentially have quite an impact on.

So what about it?

MR. KORSNESS: Maybe you could just give an overview of things we have addressed in the document.

MS. MASON: So the document talks about what the impacts will be to the seabed, it talks about the marine impacts, turbidity, talks about noise to mammals and fish during construction, and then talks about some of the impacts that after it is all laid and the seabed goes back to what it is and what the impacts of operation of it would be.

MS. LAWSON: So basically we have to go read the statement to find out.

MR. KORSNESS: Anything specific you were wondering about?

MS. LAWSON: Yeah. Well, you know, what's an accept -- I mean, what's the acceptable level of disruption to marine life I guess would be my question.

MS. MASON: So what ends up happening is that you have this corridor or what was the range that we decided that the impacts really were as far as seabed floor maybe up to 16 feet wide across the Strait. And in relationship to the whole Strait seabed floor, it kind of ends up being a small amount. There's

an acreage that we have determined what the acreage of that is and in some ways that acreage also is, because it is linear, it is not just one big block. It can heal itself more easily because you have these side areas that can come and reseed and migrate back. But there will be a trip of impact that occurs. And that's what the environmental process you know. There's turbidity levels that need to be met for.

MR. KORSNESS: And turbidity means the solids suspended in the water.

MS. MASON: You know, working with the -- doing biological assessment with NOAA, they have levels for noise and look at those. There's mitigation measures that have been put in place of how to lessen impacts. But it is not as though there are impacts. But it is figuring out what those impacts would be and then what kind of measure to take to lessen them and then the various agencies that have jurisdiction over that. They are working to work around archeological sites and impacts, you know, potential shipwrecks, things like that.

MR. KORSNESS: So most of the construction impacts in general could be characterized as temporary. And most of the operational impacts could probably be considered minor. But that's an

oversimplification. So I invite you to look at the document and determine for yourself.

MS. LAWSON: So there's going to be 550 megawatts. Is that -- it is more power?

MR. KORSNESS: It will have the capacity to transmit 550 megawatts.

MS. LAWSON: What does that do for our local environment? Anything? In what way? As far as field levels or heat or -- well, I guess I'm thinking about community health. People who live near the area. I know in Europe they have done a number of studies of showing increased cancer rates for people who live near substations. And somebody who's closely connected to the college, you know, that's going to impact that environment. Certainly there's an assisted living home right next to this site. Have those kinds of things been looked at? Or increasing that, you know, putting that much potential power generation in that little area right there?

MS. MASON: So the direct current line has different types of magnetic fields, magnetic fields tend to be ones we're most concerned about. Direct current has different types of not even impacts as alternating. Alternating current is the one who tends to create magnetic field that can be induced into

objects that a lot of the studies have been on. On direct current it doesn't induce current into people or objects.

DR. PELL: There's no power plant construction associated with the project, so there are no emissions of pollutants from generating power to supply the 550 megawatts. One of the prospects that there's a potential; the wind development on Vancouver Island and that wind energy would be used to be sent through the line to customers in the United States, that's just one possible use of the line. But the other thing to note to is that 550 megawatts is not a lot of power as power plants go, a small coal power plant is 650. When you normally think of 550 megawatts really is not a very high number. And also, you were told earlier this is a 150,000 volt line. As transmission lines go, that's considered quite small too because your long distance, long range high voltage transmission that go across the country go up to 750,000 volts. So a 150-volt line is not that high a voltage. It is not nearly as big as the numbers might sound as compared to other transmissions.

MR. KORSNESS: But the document does address specifically electromagnetic forces associated with the DC line associated with the short AC line and

even associated with the substation.

MS. MASON: The converter station and the substation.

MR. KORSNESS: So there's a point, and the documents describes this, where you're far enough away where all those levels drop off to background levels. So I won't try to characterize any more than that. The document gets specific about that.

MR. VOIGHT: I notice that line is pretty jagged. Couple questions. How deep will that cable be?

MR. WISE: About 3 feet. But it really depends. In some operations it may be deeper and other operations it may be shallower. But certainly the intent is to bury the cable the whole way.

MR. VOIGHT: And has there been a survey done of the bottom of the sound straight across there?

MR. WISE: Yes. That's correct.

MR. VOIGHT: Mostly just bare gravel and dirt throughout?

MR. WISE: It is in a very general sense mostly sand, some gravel. There are some short stretches of very hard bottom conditions, but most of it is predominantly sand.

MR. VOIGHT: How deep is the water most

of the way? I notice 27 feet is the depth of water where it would start.

MR. WISE: It would be 27-foot depth is roughly where the exit hole is.

MR. VOIGHT: Across the Strait what's the average depth?

MR. WISE: I don't know. The deepest depth is 180 meters, in feet that's 560 feet. Certainly they have installed in other parts of the world they have installed these cables in much deeper conditions over much longer ranges.

MR. VOIGHT: So most of the Strait the bottom is pretty bare, I mean, it is not like seaweed and whatever, mostly bare out there?

MR. WISE: Yes. That's what our studies have shown. That's correct.

MS. MASON: The vegetational road goes out to 100 feet deep but then it becomes too dark. So the assumption is that there is vegetation growing out to 100 feet and from there on there's none.

MR. KORSNESS: Good questions so far. Any other questions?

MS. LAWSON: Timing for this disruption in the neighborhood in terms of length of construction

MR. WISE: We looked at it pretty

closely for the EIS itself. I mean, essentially I think we're looking at about a week, something like that, about 150 feet a week or something like that.

MR. KORSNESS: That's for the trench?

MR. WISE: That's for the trenching land portion, the marine portion will actually go much quicker than that.

MS. MASON: Then the drilling at the ADD site 25 days.

MR. WISE: 25 days, that's -- there's a bit of a buffer there. But yeah, we expect to be around 25 days.

MS. MASON: The drill site for the horizontal directional drill that's -- that setup will be there for 25 days drilling.

MR. WISE: For that we have been in discussions with the city about a noise variance. And so there's -- and they had a lot of comments and a lot of requirements that they would like us to meet in terms of the noise. And again, I can talk with you about that later. So that was certainly a concern that we have heard early on in the project. And one that we very much want to mitigate.

MS. MASON: It is the one location and it will be 24 hours a day.

MS. LAWSON: It will be going on for 24 hours a day?

MR. WISE: Unfortunately, yes.

MS. LAWSON: For 25 days?

MR. WISE: Yes. Unfortunately we can't shut the drill down at night.

MS. MASON: For that one spot. The rest of the construction will be during regular daytime hours.

MR. VOIGHT: Will there be a big pit there for the big diesel boring machines down in the ground?

MR. WISE: You're thinking of a micro tunnel, which is a slightly different, actually, significantly different than what we're proposing. So what we're proposing is much -- it is much like a geotechnical drill. It is basically a drill that's turned on its side, so the drill actually enters the ground about 25 degrees off horizontal. So basically looks like -- looks kind of like a sled pushing the drill rod in. So yeah, there's no pit, per se. There's no big, deep pit like you would get in a micro tunnel scenario.

MR. VOIGHT: What's the diameter of the cutter head?

MR. WISE: There's two cutter heads. The first is the pilot hole and that would be about eight inches. And then after that there's a reaming bit that's put on to enlarge the hole and that might be 16 perhaps 20 inches. We're still -- again, this is what we need to do as part of detail designs to take a look to see how big that hole needs to be.

MR. WISE: It is a big pipe with a cutter head on the ground that's turning. They're able to direct that.

MR. VOIGHT: You probably mitigate noise, build a shed over a diesel engine.

MR. WISE: Yeah. Again, that's again one of the things that these contractors have done. They actually build up walls around the machinery. They use sound baffles to contain the noise. And yes, those are the types of things we'll be looking at in this project.

MS. LAWSON: What time of year do you anticipate doing this? We would prefer you do it in the winter when everybody's windows are closed.

MR. NIXON: I'd like to know how -- Mike Nixon, N-i-x-o-n. How is BPA benefitting money-wise? And how are you benefitting money-wise and how is the consumer, and I will be a consumer, the first question

is how will this affect power rates for the average consumer? I would like to know who's going to get the money. Where's it coming from?

MR. KORSNESS: Good question. BPA is neutral on this project. We don't care whether it gets built or not or whether they interconnect or not. We just need to determine whether to allow it or not. So BPA does not benefit financially from this project going forward or not. Not knowing everything that my colleagues do, I don't believe it will have any impact on rates for the consumer power rates.

MR. NIXON: Mike Nixon (phonetic). Will they go down?

MR. KORSNESS: Not up or down. It is just a pipe that goes through the neighborhood.

MR. NIXON: Why do they want to do it?

MR. WISE: Well, we see it as a commercial opportunity to reinforce the grid. I mean, currently in British Columbia there's a lot of generation of its hydro. But there's a lot of wind power that is up there. Of course, with all this generation the companies that are building this whether it is BC Hydro other entities want to be able to move this power to market and to do that really the existing transmission system doesn't work all that well for

doing that. And we think this would be an improvement in that respect. We think that improvement is a commercial opportunity.

MR. NIXON: Who do you perceive to be your market?

MR. WISE: Our market would be companies that are generating electricity in British Columbia. And it would be companies in the Pacific Northwest that would want access to that generation. MR. VOIGHT: Technically the more supply then actually the rates could possibly go down if the public utilities commission was on the ball. I mean, that's just the way -- that's the way the world does work. Supply and demand. And such, so technically with more supply you could actually benefit.

MR. KORSNESS: That's a good question. The supply and demand concept we all understand, but currently there are no users for this so we don't know where the power would come from that would be crossing the channel or where it would be going so we would not be able to answer your question because we don't know who the seller is and who the buyer is. I'm unable to answer your question.

MR. VOIGHT: With proper regulation. We don't have any regulation, in the future we might, and

it could be a benefit actually. Sounds like a fairly good idea to me, to be honest with you. And I don't like the private sector very much at all.

MR. BUTLER: I guess I was under the impression that the primary purpose of this cable was to get wind power off of the island, Sea Breeze's wind power.

MR. KORSNESS: Again, and correct me if I'm wrong, Mike, the cable is being proposed by a private company as a commercial opportunity to sell capacity across it. But there's no application for transmission at the moment. So currently there is.

MR. BUTLER: I understand that this is step one, if that's the case. But step two or some eventual step down the line I was under the impression that was going to be for wind power.

MR. KORSNESS: Well, it could be. I would -- I'm sure I'll get corrected if I'm wrong. I would characterize it as a bridge or a pipe that's being built and whoever wants to buy capacity across it and can negotiate that agreement would do so whether it be just whoever wants to. So I don't know if the pipe will be used or who will use it.

MR. BUTLER: Would the fact that it is -- all right. All we're really talking about is a new

transmission line with no use, no source and no load.

MR. KORSNESS: That's one way to put it.

MR. WISE: For the purposes of the EIS that is probably correct.

MR. KORSNESS: We're not looking at who's going to use it or where is it going to be because we don't know. We're just deciding whether to allow the interconnection or not and the impacts assuming a two-fold capacity use of that.

MS. MASON: Once there is a request for transmission so we know who's going to be generating and where it is going to go, that will need to be another process, like Jerry had mentioned, it will be another process for Bonneville to determine. It will kick in another environmental impact.

MR. BUTLER: Is that before or after it is already built?

MS. MASON: It is kind of an interesting -- it will be whoever ends up requesting to send power across it.

MR. KORSNESS: They could make that application while it is being built or they might make it after it's built. Mike?

MR. WISE: Perhaps I could add that we would not be given the financial means to build a

project until we have secured contracts for capacity on the line. And as with many projects, many transmission projects, they actually are planned in advance of generation. So sometimes on the electrical system there's a bit of a chicken and egg. Right now we know that there's a lot of generation that's under construction. And in BC, in fact, there's about probably over one billion dollars worth of generation projects that are under construction right now in British Columbia. So we know that there needs to be a new transmission built. And while we can't say this wind farm in this particular location would ship electricity across the Juan de Fuca project, we do know in a general sense that the project is needed. Obviously, we wouldn't be progressing to this point if we didn't feel it was needed. We also think that this project will provide incentive for more generation projects to be built in British Columbia. We have one of the best wind resources in the world on the coast. We have some of the best hydroelectric potential on the coast. And by hydroelectricity I mean small run-of-river or river-to-river projects. And, you know, having an additional pathway between Southern Vancouver Island and the Olympic Peninsula provides a very important link to the electrical grid in the

Pacific Northwest as a whole.

MR. BUTLER: Thanks for that clarification.

MR. VOIGHT: I was just going to say, it seems to me watching the Canadian TV that they are not moving forward with a bunch of coal fired and fossil fuel fired power plants. I think that would be a concern that would be up to the Canadian people and the Canadian government. But I would figure that the power that's generated from now on will be, you know, environmentally conscious. That's what it seems to me that you're more responsible than the American people generally. And I would, just like I said, I figure that it just sounds like a fairly good idea, actually, to me.

DR. PELL: Let me just add to that. As a general principle, the ability of the United States to import power from Canada is good. The more that we could bring into the country from other sources, the more power is available for the consumer. And to the extent that that power comes in at a price that's competitive with what it would cost to generate that power within the U.S., that has a positive effect -- that has a positive benefit long term, which is why there is a great deal of connection between the U.S.

and Canada in the Northern United States, and the U.S. and Mexico in the South. And a great deal of power is shipped across those borders. And to the extent that we can import power outside the countries, the areas that get the benefit of that power, it is all to their advantage.

For example, in the Northeast there's a great deal of power that's of hydro purely for the purpose to be sent to the American market. So those are considered positive market forces.

MS. LAWSON: I came in here thinking that this was about BPA selling energy to Canada. It's not. It is the opposite.

MR. KORSNESS: BPA has no plans to buy or sell power.

MS. LAWSON: But to hook into the grid for the power to go from here to there. But it is the power to go from there to here.

MR. WISE: Power could go both ways.

MS. LAWSON: But your main purpose for this is there to here.

MR. WISE: I would say as a general characterization, we have a lot of potential generation from British Columbia. And I think a lot of potential customers in the Pacific Northwest. So, again, in a

very general sense in going back to what Dr. Pell said, I think that really --

MS. LAWSON: It is really about generating -- that's the market that you want to develop or, I mean, let's talk about your marketing plan. So you have to get funding for all of this, yes? Once your permits are --

MR. WISE: We have to secure funding, yes.

MS. LAWSON: Once your permits are done you have to secure funding?

MR. WISE: This is the course with any project.

MS. LAWSON: But your primary focus there is on getting entities that are generating power on the island and having that come this direction through this cable?

MR. WISE: It could be on the island or it could be the mainland. It depends on the electrical system right through. There's a new transmission line that's under construction to link the mainland near Vancouver Island. So that would provide additional power for Vancouver Island.

MS. LAWSON: A similar type of --

MR. WISE: Technology. No. Actually,

they are using conventional AC technology. They went through a long hearing process and there was a lot of discussion about, you know, aerial transmission line and health effects and the like.

MR. BUTLER: Dr. Pell, could this line potentially help mitigate the Canadian entitlement?

DR. PELL: I wouldn't know about that. I'm not familiar with what you mean by the entitlement. Two things. I'm a Northeasterner. Second of all, I'm a meteorologist and my business is environmental science. So this is totally out of my area.

MR. KORSNESS: That's something that can be reviewed periodically. But it is my understanding that BPA does not consider this a benefit in that regard.

MR. GAWBER: Mark Gawber. Is it possible to make a market to interconnect directly or indirectly? Can it be sold to a company and basically be blocked for the interconnect by simply an acquisition by another corporation?

MR. KORSNESS: You lost me there.

MS. MASON: If we decide to go forward with this project could it then be -- could Sea Breeze then sell it.

MR. GAWBER: Yeah. In other words,

basically at this stage of the game what this is all about is granting or not granting permit to interconnect regardless of whether anybody really wants to use it. I'm wondering whether say, number one, Sea Breeze could sell the permit or whether the permit could be transferred to some other entity by way of Sea Breeze. For example, being acquired by another corporation or merged with another corporation.

MR. KORSNESS: Well, I can definitely state I don't know the answer to that. So we'll find out.

MR. WISE: I'll answer as an engineer, not a lawyer because I'm an engineer, not a lawyer. It would seem that a permit is very much like a patent, for instance. So the group of permits that make up this project could, in fact, be or the project could, in fact, be sold. If that does happen whoever buys the project has to follow permits. The permits are what the project is. And if an entity buys the project they would look at all of the permits and all of the conditions and all of the commitments that have been made with respect to the project. They would factor that into how much they are willing to pay for the project. Does that help?

MR. GAWBER: It makes sense.

MS. MASON: Our time for the hour hearing is at about 2 minutes.

MR. KORSNESS: You can also submit comments in writing to us before you leave today or via e-mail or BPA's web site and they will also be incorporated into the record and the EIS. So if you choose not to speak formally during this hearing then you can submit comments in other ways.

DR. PELL: It doesn't matter how you comment. Your comment will be given equal weight regardless if it is written or oral or e-mail. There's no bias in how you submit your comment. Any way you submit it will receive equal value.

MR. KORSNESS: We can go ahead and go past 6:30, so don't worry about that. Are there other comments, questions, things we need to consider in our EIS?

MS. LAWSON: Another question about decibel levels for the drilling site, what is your understanding of that?

MR. WISE: We're looking at and I know that we did some work on this for the EIS, about 100 decibels. It was 90 decibel. So it is without mitigation. So we're actually looking at -- Stacy's going to come up with the exact numbers. It is

important to present both scenarios, sort of how loud the machines would be without any noise abatement and then, you know, using noise abatement what levels could we realistically expect to achieve. So that's the information that's in the EIS.

MS. LAWSON: Is there vibration that's felt at the surface level?

MR. WISE: If you were standing about say 6 feet from the drill that's going in the ground you might feel some vibration. But that tapers off. That fades away dramatically as you move away from that location. So this is a technology that's used very commonly in cities to put in fiber optic lines, sewer lines, natural gas lines. It is something that is very common in the urban environment.

MS. LAWSON: There are many things that are common in the urban environment that are unpleasant.

MR. WISE: I think the point I wanted to make is we're not breaking new ground, so to speak. Really what we're doing here is using something that's been used before.

MS. MASON: It says 90 to 95 decibels unmitigated and slightly louder than typical construction noise levels.

DR. PELL: Let me just add for purposes of the record, I was commenting before about you're not having read the EIS. If you get the chance the summary is not very long. At least if you can turn the pages on the summary and get a feel for what's in the document I think you'll find it is worth your time.

MS. LAWSON: I will.

MR. KORSNESS: Other questions or comments?

MS. LAWSON: What time estimate do you have for building the converter station in terms of length of time?

MR. WISE: Duration of the construction?

MS. LAWSON: Yes.

MR. WISE: For that part of the project?

MS. LAWSON: Yeah.

MR. WISE: That's actually the most time-consuming part of the project. And I think it is about 10 months. Much of that time is taken up with transporting materials to the site, moving specific components of the place and testing them. The trenching itself will take considerably less time.

MS. MASON: There's a breakdown. There's a document, it has a breakdown of the different time frames for the different parts of the

construction. And some happens concurrently. So you can't add it all up. It says 10 months.

MR. WISE: And it is also important to note that a lot of that construction is within an enclosed building and the enclosed building around the converter station is designed to contain the noise of what goes on inside. So we wouldn't expect a lot of disturbance associated with that work.

MS. LAWSON: We have so much construction going on on campus right now I don't think it would be noticed. There's an increase.

MR. KORSNESS: Any last questions or comments?

MR. BUTLER: What's the difference between option A and option B up there on the south side of the existing --

MR. KORSNESS: I can explain that. We show here option A and option B is for the alternating current cable running from the DC converter station under the street up to the expanded BPA substation yard. And there's two routes we have looked at. One would be going up the street and going in perpendicular. One is starting from the corner of this part of the property and heading in a diagonal in the substation. And we haven't decided which -- BPA hasn't

decided which it will allow yet. Although currently preferred option is option A because it disturbs the least amount of BPA property and allows for expansion or other use of this area for storm water detention ponds or other things that we might need to put there.

MS. LAWSON: Will Sea Breeze foot the bill for that expansion as opposed to BPA?

MR. KORSNESS: I'm not sure we have made the determination on that.

MR. WISE: I think that's still in negotiations.

MR. KORSNESS: If we can assign it prior to accommodating the interconnection then Sea Breeze will pay for it. If it involves expansion of the network, BPA network to the benefit of the network specifically, then BPA will pay for that. So it will be part both ways.

MR. GAWBER: Again, what is the duration of the permission to interconnect? Are there any dates associated with it at all?

MR. KORSNESS: I'll be corrected if I'm wrong, I believe it would need -- would be good until enough time passes such that we feel we need to reconsider the environmental impacts or reliability impacts to the system.

DR. PELL: For the presidential permit it is once a presidential permit is issued it is good indefinitely until such time there's a change in operating conditions in which the applicant or whoever now owns the permit would have to come back as long as they don't change their operation.

MR. KORSNESS: As an example, if we gave the okay for the interconnection and nothing happened for 5 years and then 5 years from now they wanted to build, I would imagine that some portions of the EIS would need to be revisited such as plant and animal species and so on just to update it to the latest conditions and so on.

Any last questions or comments? Thank you very much for participating in the formal hearing process. We're still open for another hour. So if you have other question or would like to talk to us individually we're still here and available. So at this point I will go ahead and close the formal hearing and recording part of the process.

(Hearing concluded at 6:45 p.m.)

REPORTER'S CERTIFICATE

I, JORI L. MOORE, the undersigned Certified Court reporter and Notary Public, do hereby certify that the sworn testimony and/or proceeding transcript of which is attached, was given before me at the time and place stated therein; that any and/or all witness(es) were by me duly sworn to testify to the truth; that the sworn testimony and/or proceedings were by me stenographically recorded and transcribed under my supervision, to the best of my ability; that the foregoing transcript contains a full, true, and accurate record of all the sworn testimony and/or proceedings given and occuring at the time and place stated in the transcript; that I am in no way related to any party to the matter, nor to any counsel, nor do I have any financial interest in the event of the cause.

WITNESS MY HAND AND SEAL this 1st day of May, 2007

JORI L. MOORE
Certified Court Reporter
CCR No. 1993
Notary Public in and for the
State of Washington, residing in Yakima County
Commission expires 10/10/08