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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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Tidewalker Associates : Project No. 12704-002
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Evening Scoping Meeting
Half Moon Cove Tidal Power Project

Marine Technology Center
Multipurpose Room
16 Deep Cove Road
Eastport, Maine
Wednesday, June 24, 2009

The public hearing, pursuant to notice, convened at 7:08
p.m. before a Staff Panel:

STEPHEN KARTALIA, Federal Energy Regulatory
Commission

JOHN BAUMMER, FERC
JEFFREY BROWNING, FERC
PAUL MAKOWSKI, FERC;

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and an Applicant Panel:

NORMAND LABERGE, Ph.D., Tidewalker Associates

LESLIE BOWMAN, Tidewalker Associates

ZEL BOWMAN-LABERGE, Tidewalker Associates

ERNST F. HUNTER, Tidewalker Associates

1	LIST OF PUBLIC SPEAKERS	
2	Pat Condamo, resident of Perry	24
3	Robin Sealy	26
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1 P R O C E E D I N G S

2 MR. KARTALIA: Good evening. I'd like to welcome
3 you to the scoping meeting for the proposed Half Moon Cove
4 Tidal Power Project, FERC No. 12704. My name is Steve
5 Kartalia, I'm with the Federal Energy Regulatory Commission,
6 I'm a fisheries biologist and I'm also the Project
7 Coordinator who will be handling FERC's environmental review
8 of this proposed project.

9 I am going to go through a few slides to let you
10 know what the FERC process involves, then I'm going to let
11 Tidewalker Associates present some details about their
12 project and a description of their proposal, and then I'll
13 provide a few more slides about upcoming dates and
14 opportunities for the public to participate, and then the
15 main purpose of the meeting tonight will be to let you all
16 provide comments or ask questions, either of me or the other
17 FERC staff, or Tidewalker.

18 Before I move on with the slides, I want to let
19 you know who else from the Commission is here.

20 MR. BROWNING: My name is Jeff Browning. I'll be
21 working on the wildlife, terrestrial and endangered species
22 and cultural resources.

23 MR. BAUMMER: Hi, I'm John Baummer, I'm a
24 fisheries biologist with FERC, and I'll be working on
25 aquatic resources for this project.

1 MR. MAKOWSKI: I am Paul Makowski, I'm a civil
2 engineer. I'll be working on the soils, the geology, and
3 the project economics.

4 MR. KARTALIA: As you came in, I hope you had a
5 chance to use the sign-in sheet so we know who is here this
6 evening; and I also hope that you got a copy of the scoping
7 document, which is the document that we've prepared to let
8 you know a little bit about the project. It's early in the
9 process, so this is kind of a discovery phase of the
10 licensing process where you all, as well as we at the
11 Commission, are learning more about the project; issues that
12 may need to be addressed and studies, et cetera, and I'm
13 going to get into that a little bit more here.

14 One thing I wanted to point out is that on page
15 18 of the scoping document, there's an incorrect due date
16 for comments on the scoping document and additional study
17 requests. The date that's in there on page 18 is incorrect,
18 but the page in the back of the document, in Appendix B, the
19 process schedule is correct. That date says July 23rd, and
20 that's the correct date for filing comments. That is not
21 the last time to comment or be involved in the process, but
22 it's the time at which we need to receive additional study
23 requests and comments on our scoping document.

24 I have a slide later that lays out some key dates
25 for you all to remember.

1 So you met the FERC staff here. I'm going to go
2 over a little bit about how the process will unfold, a flow
3 chart of the process, and give you some details about the
4 purpose of why we're here; then I'm going to turn it over to
5 Tidewalker to provide some details about their project and
6 project description; then we'll discuss issues and studies,
7 some important dates, and then you all will have as much
8 time as you want to ask questions or provide comments.

9 The sign-in, hopefully you did that. If you
10 speak tonight, I'd like you to use the microphone and to
11 make sure that you state your name clearly so that the court
12 reporter can accurately attribute comments to you. This
13 transcript that's being prepared will be on our website. If
14 you go to our website, FERC.gov, and that is in the scoping
15 document, there are a couple resources you should know
16 about.

17 One is called eLibrary, which is an electronic
18 listing of all the documents that either the Commission
19 issues or that people file with us; and you can search it by
20 the docket number, which in this case is that 12704 number.
21 That way you can find out everything that's been issued or
22 filed regarding this project.

23 You can also find something there called
24 eSubscription, which allows you to get e-mail notifications
25 every time something is filed, so there would be no chance

1 of you missing something if you e-subscribed; then you can
2 provide this docket number and your e-mail address, and if
3 someone filed something, you would know about it right away.

4 In the scoping document, there are instructions
5 for providing written comments, and those are on page 18.
6 And the mailing list that's on the back of this document is
7 a combination of the list that Tidewalker used to distribute
8 their PAD, which is their preliminary application document
9 they sent out in March. We added to that list several key
10 agency addresses, several tribal contacts, and also anyone
11 that was already on our official mailing list for the
12 project.

13 If you want to be added to the mailing list,
14 there are instructions in the document to do that, and
15 that's what the stack of documents over there are; the
16 scoping document. There are instructions of how to get
17 added to the mailing list or how to get taken off the
18 mailing list, if you would rather not get hard copies
19 through the mail. And you can also correct an address or
20 add a second address, whatever you want.

21 (Slide.)

22 Briefly, back in March -- this process that we're
23 about to undertake is approximately a five year process,
24 that will involve several steps. Back in March, Tidewalker
25 filed with the Commission their Notice of Intent and their

1 Preliminary Application Document, which gave some details
2 about what they're proposing.

3 Right now we're beginning the scoping process.
4 We mailed out our scoping documents back at the end of May,
5 and this process is where we identify all the environmental
6 issues as well as other issues affecting the community --
7 like socioeconomics or anything people raise -- we need to
8 address and determine whether studies are necessary to
9 gather data for us to evaluate what the effects might be.

10 So this is very early in the process. This next
11 stage will be very important, because as anything that needs
12 to be studied, will need to be studied in the next couple
13 years; and that's between now and approximately February;
14 we're going to be identifying issues, studies and then
15 providing a determination letter to Tidewalker -- this is
16 the Commission that will do that. We're going to
17 essentially tell Tidewalker in February what they need to
18 study and provide to the Commission so that we have the
19 information we need to conduct an environmental review.

20 Right now we don't have all the information we
21 need, and that's one of the major purposes of scoping, is to
22 identify that information. If there are reports and studies
23 that are out there already, we want to get that stuff into
24 the record; and if there are studies that need to be
25 conducted, we want to identify what those studies are. So

1 that's the study plan development stage.

2 Then there will be one to two field seasons of
3 studies where all this data and information is collected.
4 Then Tidewalker will file an application with us, and it may
5 need to be supplemented. Once we feel we have all the
6 information we need to conduct our environmental review,
7 we'll issue a notice that the application is ready for
8 environmental analysis. At that point we will proceed to
9 write an environmental assessment or an environmental impact
10 statement; and the reason we do that is because under the
11 National Environmental Policy Act, any federal agency needs
12 to disclose to the public what the environmental impacts of
13 their decisions are. So that's really the main reason this
14 whole FERC process exists; because we can't just make a
15 decision to issue a license or not issue a license; we have
16 to do an entire environmental review and let the public
17 know what we think the effects would be; good affects and
18 adverse effects, both.

19 Once this happens, and the environmental review
20 is completed and the public has had a chance to comment on
21 our assessment, then the Commission, which is a five-person
22 appointed Commission, would vote on whether to issue
23 Tidewalker a license, and if so, with what conditions in the
24 license? So that's what this is all leading up to. We
25 gather all the information with the public and agencies

1 help, and then a five person commission actually determines
2 whether the license gets issued.

3 (Slide.)

4 Our role is to make sure that we include the
5 public tribes, nongovernmental organizations, any interested
6 stakeholders, and we pull into the record all the input and
7 information that we need to do an environmental review.
8 We're here to identify issues, to discuss any existing
9 conditions and information that we need to get into the
10 record, explore any additional information needs, study
11 needs for example; and then let you understand what the
12 process is so that you can stay involved if you wish to.

13 At this point I think I will turn it over to
14 Tidewalker, and you can introduce yourselves, and then I'll
15 get your presentation set up.

16 DR. LABERGE: Thank you, Steve.

17 Good evening. Thank you for coming and listening
18 to our proposal for a tidal power project at the entrance to
19 Half Moon Cove. Half Moon Cove has been proposed by
20 Tidewalker Associates, and I have three members of the
21 Association with me.

22 First one to the left is Leslie Bowman, artist,
23 photographer, former member of the Eastport Arts Center and
24 Quoddy Bay Land Trust. She now works as an editor for
25 Bangor Metro, the monthly magazine.

1 Next to Leslie is Zel Bowman-Laberge, our
2 daughter, who is a fourth year architecture student at the
3 Rhode Island School of Design, and her interests include
4 sustainable designs.

5 The third member of our Association today is
6 Ernst F. Hunter, a recent graduate of law school, candidate
7 on taxation issues and with experience in tax revenues and
8 other business-type areas.

9 I'm Normand Laberge, my background is as a
10 materials scientist, and I'm also a professional engineer.
11 I first started working on the project 30 years ago; 1976,
12 and this was resurrected again in 2006, so I tell my family
13 I doubt I'll have another chance 30 years from now, but
14 still we're trying to make the best of our opportunity for
15 this project.

16 (Slide.)

17 This is an aerial view of the proposed Half Moon
18 Cove site. It's located between the communities of Perry,
19 Eastport, and Pleasant Point reservation. There is only
20 entrance to Half Moon Cove now, it's a distance across
21 approximately 1200 feet, and there was a former location of
22 a toll bridge which connected Perry with Eastport.

23 The surface area of the basin at high tide is
24 approximately 900 acres, and for spring tide, that draws
25 down to about 250 acres. Part of our investigations, we've

1 also considered the use of these current-driven devices or
2 hydrokinetic devices. In our case, due to the configuration
3 of the basin, we could put possibly four 16-foot diameter
4 units. So the drawback of that proposal is that it would
5 produce a hundred times less energy from the construction of
6 the dam and the operation of this mode for the site.

7 We note also the location of two causeways
8 between Pleasant Point, Carlow Island; Carlow Island and
9 Moose Island or Eastport. Those were constructed in the
10 1930s by the Corps of Engineers as part of a big
11 Passamaquoddy project, and in the 1950s a decision was made
12 to discontinue the use of the toll bridge and place a road
13 across the causeway; and since then, that's been the primary
14 access route into Eastport.

15 In considering the plans for the project, we are
16 looking into the placement of a filling-emptying gate on the
17 Passamaquoddy Bay side to allow the Passamaquoddy Bay waters
18 to go into Half Moon Cove.

19 (Slide.)

20 This is a schematic of the site. Once again, the
21 dam location, possible emptying and filling gates. One of
22 the unavoidable consequences for our mode of operation is
23 that high tide would remain the same, but low tide would be
24 increased by two or three feet for every tide. And I'll
25 show why that occurs.

1 The darker blue or the darker color is the normal
2 low tide at a spring tide, and the lighter blue is the
3 location of the new low tide mark under the proposed mode of
4 development.

5 (Slide.)

6 This schematic drawing of how a tidal barrage
7 works. Essentially you place a dam across the entrance, you
8 allow a difference in water elevation between the basin and
9 the ocean, and once you have enough elevation, you release
10 the water through the turbines, generate electricity for
11 both the incoming and outgoing tides.

12 (Slide.)

13 This is a diagram of different options we
14 considered for the Half Moon Cove project. The red line is
15 a natural tide cycle, high tide/low tide/high tide, a period
16 of about 12 hours and 25 minutes; with the understanding
17 that in neap tide conditions, low tide conditions, the tidal
18 range is 12 feet up to 26 feet. The green line sort of
19 extends the length of production. The yellow line is a
20 steeper curve and generates more electricity because of
21 higher efficiency. And the blue line is our desired mode of
22 operation, which operates at a constant head or
23 differential, and generates both here and as the tide is
24 coming back in.

25 The main purpose of selecting the blue one is to

1 minimize the amount of tidal range reduction in the basin.
2 With the green side, we would lose this much tide, which is
3 about 6 to 8 feet. With the blue option, which we consider
4 the environmental case, we would lose only 2 to 3 feet per
5 tide cycle.

6 (Slide.)

7 This is a diagram of the intertidal zone. The
8 impact on the area, we feel the impacts will not be
9 significant because the tidal basin now has to survive
10 within the tidal range, which goes from 12 feet to 26 feet,
11 and our change would be 2 to 3 feet at the low end of the
12 spectrum.

13 And I'll turn this over now to Leslie Bowman, who
14 will talk about the reason we're doing this project, and
15 supporting.

16 MS. BOWMAN: Thank you. Leslie Bowman.

17 The question is why? Why would we do this
18 project? And having worked on it for so many years now,
19 sometimes we ask ourselves that: Is this just something
20 that we think is a good idea, or is it something that truly,
21 other people share our interest in it?

22 (Slide.)

23 Clean production of a local energy resource.
24 Everyone who lives here knows the extreme tides and the
25 potential for generating electricity, especially in this day

1 when it's more than just compensating for the price of oil,
2 or using oil; it's also, we're looking at environmental
3 factors of global warming and excessive burning of fossil
4 fuels. So renewed interest in tidal power.

5 We've also calculated that this project can
6 generate power from 7 to 9 cents a kilowatt hour, and that
7 is a very attractive figure, especially when we're paying
8 about 22 cents a kilowatt hour now. It's true that that's
9 the production cost, over a 50-year period. So when the
10 cost of fuel goes up and down, this is not impacted by that.
11 All the cost is capital, up front; and then with the
12 exception of some repairs and whatever you do during that
13 time, you can guarantee between 7 to 9 cents per kilowatt
14 hour.

15 Also, the annual production is equivalent to
16 1,500,000 gallons of oil. So this is a significant amount
17 of energy, and that is a major reason.

18 It's available technology. These turbines and
19 the mode of production with the barrage that's already found
20 in a number of other countries, in Nova Scotia, in France,
21 in Korea, in Russia, China's working on a project like this;
22 so it's not a new technology.

23 It's dependable, with the tides. We know we can
24 predict when it is going to happen, and what the mode of
25 operation is dependable. It's compatible with the

1 environmental values of the region, and it's because -- a
2 lot of people come to this region, they're fascinated with
3 the tides. People who enjoy all aspects of the environment
4 also are the same people who are interested in alternative
5 energy, in many cases. So I think it's compatible with what
6 our values are.

7 Creating an economic engine. This project and
8 the amount of power that it's going to produce will be
9 available to the community, through the years as we were
10 working on the project, obviously we tried to figure out
11 ways where it could be used locally; whether bringing
12 industry in that may use this power or go -- my biggest
13 interest is to find some way to bring some sort of industry,
14 whether it's gardens, greenhouses or maybe a factor that
15 produces turbine blades, whatever; bring something in and
16 provide the energy for that, and create jobs.

17 And it's consistent with our history.

18 (Slide.)

19 Anybody here today remember back then?

20 Okay. You remember the Quoddy project.

21 AUDIENCE: She does.

22 MS. BOWMAN: See, we want to build something that
23 honors that, you know, because there are people around that
24 still remember that. So this was in the Thirties, and this
25 is the causeway that was built. It was their first dam,

1 that now is making part -- it's what makes Half Moon Cove a
2 unique ecosystem now. This is also the causeway that we're
3 considering breaching, because there's a concern with the
4 environment and hopes to bring it back. The Tribe, earlier
5 today they were very interested in a project they're working
6 with the Army Corps of Engineers to breach this dam and
7 bring, flushing the waters in from Passamaquoddy Bay into
8 Cobscook, which has been limited for all these years.

9 Part of our interest is making this project
10 something that the community can support; and answer to many
11 of the needs. And so we have been working very closely with
12 people about environmental issues. But the history is that
13 this area is ripe for tidal power and that's what we're
14 working on.

15 So why are we here? Diverse interests, interests
16 of all peoples, whether you live right there at the site --
17 we have members in the audience here who live right at the
18 site -- or you're a fisherman, you want to create jobs for
19 the area; you're the city manager, you want to see how this
20 is going to impact our tax base -- there are many interests,
21 and so that's why we're here today, to address those. So
22 please let your voices be heard. And the only way this
23 project will ever really materialize, because it's a big
24 project; you'll require support and efforts of the entire
25 community.

1 So five years just doing the environmental work.

2 Now I'll turn it over to my daughter, who -- we
3 think of it as passing it on to the next generation.

4 (Slide.)

5 MS. BOWMAN-LABERGE: Here is an image of the old
6 toll road as it stood in the early 1900s, and a rendering of
7 sort of how we're seeing it. We're taking where there used
8 to be a link and creating a new link as a way of bringing
9 the community back together and also making us energy
10 efficient.

11 (Slide.)

12 Some of the drawbacks of the project. Clearly,
13 my father spoke about tide change, the low tide will be
14 increased two to three feet which could have effects on some
15 of the aquatic life on the site. Also there are impacts
16 associated with construction. Anytime you have construction
17 there are problems such as noise, traffic; but also along
18 with construction comes jobs and other sort of economic
19 needs.

20 And the access to the Cove is an issue that a lot
21 of fishermen and people that enjoy boating on the site are
22 going to be faced with. However, such as the title project
23 in Annapolis Royal, there is a parallel set of docks which
24 allows small boats into the site. So small boats would be
25 allowed into the site, and this is something that we're

1 discussing, and we're looking for input as far as the
2 boating is concerned.

3 (Slide.)

4 My interest in the project, since I was raised in
5 Washington County, I grew up here; now I go to school out of
6 state, but I've always planned on coming back to Washington
7 County. But for my generation, the real question is energy,
8 what are we going to do? Jobs, heating homes, and this is a
9 unique project that we can find a way to efficient with our
10 energy. But we need to work together in this, it's
11 definitely -- as my mother said, it's a community project.
12 And we're all going to have to work together with
13 imagination, cooperation, respect and creativity.

14 (Slide.)

15 And the other option to doing something about
16 this is to do nothing. And then by standing back or letting
17 outside investors come in and have their own agenda here.
18 So with a project like this it would really great to see the
19 community being the ones involved and having it from the
20 inside, not from the outside.

21 (Slide.)

22 And I'm going to turn it over.

23 MR. HUNTER: Hi, Ernst Hunter. As you can
24 probably tell from Dr. Laberge's introduction, my primary
25 role in this project is to handle the legal work, so

1 certainly tonight if you have an engineering question, I
2 would say direct it to him; it's not exactly my field of
3 expertise.

4 (Slide.)

5 My role in this project, as I see it, is -- my
6 primary role in any case is to ensure that the project
7 creates an institutional structure for investment and
8 developments which maintain its economic viability so that
9 we can attract investments and actually follow this through
10 to construction; but while incorporating the community
11 concerns as well as preserving the local environments and
12 ensuring the enhancement of the local economy; and that's
13 basically what the purpose of this meeting here is tonight.
14 So I encourage all of you to register your comments, ask
15 questions, and if you don't speak tonight certainly there
16 will be information on how you can submit written comments
17 to the FERC by the deadline -- between now and July 23rd.

18 One thing I did want to mention is, I don't think
19 this might have been entirely clear, was that the breaching
20 is actually part of our design for the project as it
21 currently stands. I don't know if that came across. But as
22 the project is currently conceived, the breaching of the
23 causeway, which as Normand stated -- or I believe Leslie
24 talked about how this would help to reinvigorate the
25 environment by mixing the Passamaquoddy waters into the Half

1 Moon Cove. This is actually also something that we've
2 incorporated into the project that will actually help to
3 regulate the head on the water that is within the embayment,
4 so that that's something that we can use in conjunction with
5 the structure of the dam to help generate electricity. I
6 just thought I would clarify that.

7 Lastly, I'll just say we welcome all your
8 comments, and now I'm going to hand it over to Steve
9 Kartalia.

10 MR. KARTALIA: Thank you. Let me switch back,
11 and shortly we'll get back to or begin the most important
12 part of the evening, which is to get comments.

13 If you look on pages 13 to 15 in the scoping
14 document, the Commission -- we've already taken a stab at
15 identifying what we think are the issues related to the
16 development of this proposed project. And they're outlined
17 on those pages in several different categories. I'm not
18 going to go through them all, but I would like you to review
19 those, because we want to know your feedback on whether
20 there are other issues you think we haven't identified, or
21 if there are some issues that are on that list that you
22 think could be taken off. That's one of the main purposes
23 of scoping, is to make sure that list is complete and
24 accurate.

25 As I mentioned earlier, the other major purpose

1 of this meeting is to solicit additional study requests
2 based on the issues, those we've identified and others you
3 may think of that we haven't identified yet. Additional
4 study requests need to come in to us before July 23rd, on or
5 before the 23rd of July.

6 If you file an additional study request, these
7 criteria, which are outlined in Appendix A of the scoping
8 document, we want you to address these criteria to give us
9 some guidance and rationale for the basis of the study
10 request. So if you file a study request, please address
11 these items in the request.

12 One that often generates questions is, especially
13 from people who aren't affiliated with an agency, this last
14 bullet here -- if you think a study is necessary but you
15 aren't very clear on how to estimate the cost of it, then at
16 least give us some description of what level of effort you
17 think might be involved. Say, for example, you think a
18 recreational survey is necessary to determine how many
19 people use the bay for various recreational activities, then
20 we would want to know, for example, if you think that's a
21 summer, spring, fall type of activity, how many seasons
22 worth of survey work might you think would be necessary.

23 So if you can't estimate cost, then try to
24 estimate a level of effort for the study.

25 AUDIENCE: Is that list in the packet?

1 MR. KARTALIA: It's in Appendix A.

2 Now these are some important upcoming dates. As
3 I mentioned, the study request, comments on our scoping
4 document, and comments on Tidewalker's preliminary
5 application document are due by July 23rd. Then over the
6 next seven to eight months we're going to be working with
7 all stakeholders and Tidewalker to determine the
8 comprehensive study plan that needs to be implemented over
9 the next year or two.

10 So between now and February, Tidewalker will put
11 forward their proposed study plan after they review the
12 study requests; then there will be study plan meetings in
13 October and there may be more than one meeting; they will be
14 held locally. FERC staff may participate by teleconference
15 if there are multiple meetings, just due to travel cost
16 restrictions for us.

17 And then Tidewalker will put together a revised
18 study plan to incorporate input that they gathered through
19 the study plan meetings. Then the Commission will issue a
20 study plan determination in early February. And that
21 essentially tells Tidewalker what it is they need to study
22 over the next one to two years, to gather all the
23 information that the Commission staff need to do their
24 environmental review.

25 And now is the part of the meeting that's the

1 most important, where we take your questions; and that is we
2 meaning either the Commission staff or Tidewalker staff, or
3 if you have questions of us or if you would just like to
4 make a comment. And I'll remind you that if you do make a
5 comment, please use the microphone and if your name is
6 difficult to spell or not obvious, please help the court
7 reporter out with that.

8 And I'll open it up now to anyone who would like
9 to make a comment or ask a question.

10 MR. CONDAMO: My name is Pat Condamo {ph}, I live
11 on the end of the Old East Port Road in Perry. My concern
12 is what impact it's going to have on me both during
13 construction and at the completion of the project. What are
14 my surroundings going to be? That's what I'm concerned
15 about.

16 And looking at the project area you have circled
17 and the letter that was mailed out, it seems I live inside
18 that area, and that's what I'm concerned about.

19 MR. KARTALIA: I think you might be talking about
20 the letter that you sent to abutters. So maybe if you want
21 to describe a little about what the landscape changes will
22 be?

23 Regarding traffic, that may well be one of the
24 studies that needs to be conducted, or at least the
25 Commission will probably have to look at an estimate of

1 traffic in and out of the area due to the construction and
2 then eventual ongoing operation and maintenance.

3 MR. BROWNING: We also look at noise as well,
4 generated, and any aesthetics of the project, as well.

5 MS. BOWMAN: First of all when I drew this
6 circle, I think I told you earlier it was a graphic
7 decision. There has been no decision made exactly what is
8 the project area outside of that narrow range, which is in
9 where the construction begins, the edge. But any property
10 near that is going to be impacted, and so exactly how it
11 will be impacted depending on the design, the legal issues
12 associated with property that's going to be impacted is
13 something that obviously we are going to have to address. I
14 can't answer those questions, though; designed as exactly
15 what it will be, we don't know.

16 Do you have any thoughts about that?

17 MR. HUNTER: I think it's really too early in the
18 process.

19 MS. BOWMAN-LABERGE: To know exactly, but please
20 stay involved and then we will do our best to keep you
21 posted as any decisions start being made; and as you know,
22 it's a long process to get there.

23 But in order to build a project there will have
24 to be property that is used for just parking the vehicles
25 and such. And how that's going to be decided, I'm not in a

1 position. I don't know if you guys can help with that.

2 MR. KARTALIA: Not really. Since we don't know
3 your exact --

4 MS. BOWMAN: The footprint.

5 MR. KARTALIA: Exactly. It will depend on that,
6 and it sounds like that will need to be the subject of a
7 study to -- the different construction configurations would
8 have to each consider what land is impacted and what options
9 there are for minimizing that, and what the potential impact
10 should be.

11 MS. BOWMAN: And the compensation for that. I
12 mean, obviously it becomes part of the cost of the project
13 to acquire property that may be needed.

14 MR. KARTALIA: But that issue will be addressed,
15 and we probably should add that to the list of issues.
16 Thank you for bringing it up.

17 Do you have anything else to add?

18 MR. CONDAMO: No, other than the in-and-out
19 access with the boat, which I think she already addressed.

20 MS. BOWMAN: Well, we're looking at it.

21 MR. KARTALIA: Anyone else?

22 MS. SEALY: My name is Robin Sealy. I'm new to
23 this project, but as I read over the description, I don't
24 see anything about breaching the causeway; and it seems like
25 if you're breaching a causeway, you're really talking about

1 two major projects; one is putting a dam across the Cove and
2 the other thing is breaching the causeway, and it's almost -
3 - I mean, those are two such huge events to that system that
4 it would be hard, I think, to consider them together; but I
5 think they must be considered together.

6 But I don't see it in the project description, so
7 I'm wondering, is this an up-to-date project description?

8 MR. KARTALIA: At the time we wrote that and
9 issued it in May, we weren't aware that, FERC staff weren't
10 aware that breaching the causeway was one of the possible --

11

12 MS. SEALY: Because that adds a whole another
13 level.

14 MR. KARTALIA: It does. So in our environmental
15 analysis, that would become part of the project description
16 and part of the proposed action that we would have to
17 evaluate.

18 MS. SEALY: Okay.

19 MR. KARTALIA: And it won't be just our agency,
20 because that's a roadway the Corps of Engineers will also be
21 evaluating that aspect of it.

22 MS. SEALY: Well, I only have questions about
23 breaching a causeway, but since breaching a causeway isn't
24 mentioned in here I guess I will just go ahead and --

25 MR. KARTALIA: Well, they said it's part of the

1 plan, so go ahead. I mean, they're your questions, feel
2 free to ask.

3 MS. SEALY: Okay. And the other thing is, I
4 wonder -- and this is a legal question -- since the
5 shoreland owners own to the mean low water mark and you're
6 now taking away 3 feet of tidal height, that's a fair amount
7 of property; and I'm wondering, are you planning to buy up
8 from all the people that own the shoreline all the area that
9 you'd need to flood that three feet?

10 MR. HUNTER: If I may, at the very least,
11 easements would need to be purchased by the abutting land
12 owners.

13 MS. SEALY: And would you -- is this the kind of
14 project that you take by eminent domain if people didn't
15 want to give it to you?

16 MR. HUNTER: Yes, that is always a possibility in
17 a project. You know, on such a large scale thing if there
18 are a lot of abutters, there is always the possibility there
19 may be a few people who, you know, or even one person who is
20 holding out, you know, basically kill the project. So I
21 wouldn't say that's not a possibility. Obviously that's not
22 the preferred method of doing this.

23 MS. SEALY: So would the actual correct project
24 description just add in the breaching of the causeway to the
25 project description, and everything else in here would stay

1 the same?

2 MR. KARTALIA: As far as we know, there are some
3 additional details of the project that are not yet set in
4 stone, so to speak; and I think during this study plan
5 development stage, Tidewalker is probably going to narrow
6 the range of alternatives, eventually select one or two
7 alternatives that would be more easily handled in a single
8 environmental review document.

9 But certainly the causeway breaching would be a
10 component of the project description.

11 MR. BAUMMER: We typically issue a revised
12 scoping document as well after we have these public meetings
13 and hear what people have to say about that; so we would
14 include that as part of the project description if that's
15 what Tidewalker is indeed proposing for that.

16 DR. LABERGE: One question on the breaching of
17 the causeway project. This was initially initiated by the
18 Passamaquoddy Tribe in 2004 and 2005, and they've worked
19 with the Corps of Engineers in preparing a plan, a rough
20 outline of what they plan to do.

21 The breaching of the dam is an element that
22 represents a type of effort that we could cooperate with the
23 local communities to get the project done. We would
24 cooperate in the sense that we would want to put emptying
25 and filling gates instead of just a calvert or a free-flow

1 structure.

2 I could send you a copy of the Corps of Engineers
3 report that looks at some of the environmental issues
4 associated with it. To get that particular project licensed
5 would require an application with the Corps and other
6 agencies, because it would involve dredging material on both
7 sides of the Cove.

8 We feel it's a worthwhile effort, and we intend
9 to cooperate with the Passamaquoddy Tribe and other entities
10 to see if that's possible.

11 Another potential project of mutual interest was
12 expressed today by the Passamaquoddy Tribe as to diverting
13 traffic away from the Pleasant Point Reservation across the
14 rock fill structure. Once again, that's not part of our
15 plans, but we're willing to cooperate with the communities
16 to see if that's an option that could address some of the
17 issues affecting the relationships between the different
18 communities.

19 One final point on the impact on the abutting
20 landowners, that the State would have to also issue us a
21 submerged lands lease. The State controls the mean low
22 water, and in this case it's sort of a complex situation,
23 because the mean low tide is below the area that it would be
24 directly impacted by the project. The two to three feet of
25 land that would permanently be transferred by high tide

1 intertidal zone to submerged land is two to three feet above
2 the spring tide level, the lowest low tide level; so as
3 Ernst mentioned, there's a legal question about the
4 compensation due the abutting land owners, and exactly what
5 the impact will be; because the bulk, the only real impact
6 which will occur all the time is located below the mean low
7 water, so it's a complicated issue. But we're committed to
8 try to minimize the loss of tidal range within the
9 impoundment.

10 MR. BROWNING: I had a quick question.

11 It's kind of a legal question, since you brought
12 up the lands. Since the State of Maine owns below mean low
13 water, and if that changes would the land, whether it's
14 compensated eminent domain or easement or whatever, would
15 that then become State of Maine property? I have no idea.

16 MR. HUNTER: No, I was actually thinking about
17 that myself, and I think that's a very good question;
18 actually one I don't know the answer to. And I'm not sure
19 that's actually something that -- that might be a case of
20 first impression; something I'll look into, though.

21 MR. BROWNING: Okay.

22 MR. KARTALIA: Would anyone else like to make a
23 comment or ask a question?

24 MS. HIGGINSON: I'm Marged Higginson. I have one
25 of those names that's hard to spell; [spelling]. I'm on

1 Snyder Road on Half Moon Cove, and I just have a couple of
2 questions. No answers; just questions.

3 I'm interested in knowing what the project, once
4 developed, would do as far as night sky is concerned. Would
5 there be light pollution, would this be addressed in the
6 project that all lighting be directed downward? Is that
7 part of the considerations that anyone would have, is one of
8 the questions.

9 Shall I let somebody have a shot at that before I
10 ask another question?

11 MR. KARTALIA: Why don't you ask all --

12 MR. BROWNING: Go ahead, ask the others.

13 MS. HIGGINSON: I think part of the question was
14 already asked about the noise after the construction, in the
15 working of the actual facility. What would the noise be?

16 I also had the concern about what happens with
17 the clambers and the wrinklers, and that has been brought
18 up.

19 One thing I was interested in, and maybe Bud
20 remembers this from when they were studying the coastal
21 water and the best uses of it; at some point I'm sure I
22 remember hearing that the water in Cobscook Bay actually had
23 a higher rating than the water in Passamaquoddy Bay. So if
24 we're suddenly going to mix that water again, is that
25 necessarily good? And I'm not saying it is or it isn't, but

1 I just remember hearing that at some point along the way.

2 There was some discussion about whether there
3 might or might not be a road put over that dam, and if so
4 would it be something that could sustain tractor trailers?
5 I'm sure that little old covered bridge didn't ever have to
6 deal with anything like that, or the residents on Toll
7 Bridge Road back in those days.

8 And once electricity gets generated, by what
9 means does it get transmitted out to wherever it's going,
10 above wires or what type? And I think that's it.

11 DR. LABERGE: Let me try to remember all the
12 questions on light.

13 MS. HIGGINSON: I have them in writing.

14 DR. LABERGE: On the question on light, you can
15 be sure that this panel is real sensitive to light pollution
16 issues, and every effort will be made to keep the lighting
17 downwards and not shining into people's home.

18 On the question of -- could you give me the
19 second, please?

20 MS. HIGGINSON: The noise. The noise generated -
21 -

22 MR. KARTALIA: That issue has been brought up by
23 Bob Peacock, as you know, who lives right at the entrance.
24 When I talked to Bob, he had some associates who lived near
25 the La Rance tidal project in France, and it seems like the

1 noise issue there was not so much the water rushing, but it
2 was the generator design or the transmission, transformers,
3 et cetera. And in 1975, after approximately ten years of
4 operation, La Rance changed their generators; and once they
5 did that, that reduced considerably the noise issue, and
6 that doesn't seem to be a problem in La Rance.

7 The other tidal project with experience is the
8 Annapolis Royal project, and we went there last year. You
9 will hear the rushing of the water. The fact that when you
10 discharge the water it's going to be below the water level.
11 So the rushing water through the turbines will be muffled by
12 a layer of water.

13 The greatest potential, I think, for hearing
14 rushing water is during the spring tide when you're flowing
15 through the gates, you're flowing all water through the
16 emptying, filling gates; but with proper design with the
17 Venturi type of effect, I think those type of noises can be
18 minimized.

19 And your third question?

20 MR. KARTALIA: Water quality exchange from
21 Passamaquoddy Bay to Cobscook.

22 DR. LABERGE: Texas A&M did the study in 1999
23 comparing the residence time of neutral particles in
24 Cobscook Bay compared to Half Moon Cove. In Cobscook Bay,
25 the residence time was two days, in Half Moon Cove it was

1 seven days.

2 So it's felt, by opening up Passamaquoddy and
3 returning to some of the historic conditions that that
4 residence time will decrease and therefore improve the water
5 quality of the Cove.

6 And your fourth question?

7 MS. HIGGINSON: If there were going to be a road
8 over the dam, would it be the type that would be handling
9 tractor-trailers or would this just be normal vehicles?

10 DR. LABERGE: Considering two dams; one would be
11 a rock filled dam similar to the causeway, the other one
12 would be a tidal wall with sort of piles, and a cantilever
13 structure on top.

14 We are committed now to put a one-lane road
15 across the dam as a service type of facility. If there is
16 interest in the communities with Passamaquoddy to divert
17 traffic, with possibly an Eastport Port Authority to
18 increase traffic away from the reservation, we will work
19 with the communities, but it's not a fundamental element of
20 our design because we're in the power business and not in
21 the transportation business.

22 Is there one more?

23 MS. HIGGINSON: How does the electricity get
24 transmitted from the turbines to wherever it's going.

25 DR. LABERGE: Well, as you know, the old Bangor

1 hydro line used to service Eastport; now it's been rerouted
2 through Pleasant Point. The line is still available from
3 the Perry end and could be upgraded to go across the
4 entrance also.

5 In our proposal, we would have to upgrade the
6 capacity of the line to Pembroke approximately seven miles.
7 But it is our hope to use as much as possible the energy in
8 the region, that we will be discussing with the
9 Passamaquoddy Tribe because of their nature as a
10 municipality to see if they could use the power on the
11 reservation. In the same way, if the right type of
12 infrastructure is created as Ernst mentioned, then possibly
13 the energy could be used within the region.

14 I think, this is my thought, that people near the
15 dam will have an easier access to the supply of electricity
16 from the project because of the distance factor.

17 MR. KARTALIA: And just to confirm something; our
18 environmental assessment document that we would prepare
19 after all the study results come in, we'll definitely
20 include an evaluation of light, noise pollution, potential
21 traffic changes, and certainly any water quality effects
22 would be addressed and we would try to predict. And if an
23 exact prediction was not possible, then we sometimes in a
24 study, sometimes when we can't predict accurately what the
25 exact effects would be, we would perhaps implement some sort

1 of post-licensing water quality monitoring plan; that
2 wouldn't be uncommon for a FERC-licensed project.

3 So there's lot of ways that could be handled; but
4 that issue will definitely be evaluated.

5 MS. HIGGINSON: Call me Columbo. Can I have one
6 more question?

7 MR. KARTALIA: Sure.

8 MS. HIGGINSON: Would it be evaluate as to
9 whether the flood plain would change? All around Half Moon
10 Cove there is a flood plain, and many times Toll Bridge Road
11 almost goes bye-bye.

12 MR. KARTALIA: Yes. We would definitely look at
13 the effects of high water on the surrounding area.

14 MS. HIGGINSON: Thank you.

15 MR. KARTALIA: Okay.

16 AUDIENCE: Has anybody got a complete drawing of
17 what this is going to look like when it's complete, with the
18 flowers and everything around it?

19 (Laughter)

20 Usually an engineer will draw something up.

21 MR. KARTALIA: Exactly, and I assume that will be
22 forthcoming once a design is chosen; but since there are
23 sill a couple variables that haven't been determined yet,
24 that type of drawing isn't available.

25 And obviously, since your immediate surroundings

1 will be affected.

2 I definitely encourage you to stay involved in
3 this process, being an adjacent land owner and also, if you
4 are not on the mailing list now, you should be on the
5 mailing list.

6 AUDIENCE: I just put myself on it.

7 MR. KARTALIA: Okay good.

8 Yes.

9 Ms. AUDIENCE: Looking at this list of studies,
10 this is going to be fabulously expensive to do. Is this
11 private money or public money?

12 MR. KARTALIA: Well, that will be Tidewalker's
13 money. I mean, the applicant is always responsible for
14 doing the studies. That's not public money.

15 And that list is likely to grow, after that July
16 23rd date, there will be quite a few additional studies that
17 are added to that list, but that remains to be seen.

18 Any other comments or questions?

19 (No response.)

20 Okay, well, I'll just remind you, eLibrary,
21 eSubscription are very good ways to keep track of what's
22 going on on this project, and if you go to our website,
23 FERC.gov, you can sign up for eSubscription or check on
24 eLibrary under this docket number to find out important
25 information about the project, what's been filed and what's

1 been issued.

2 Please take as many copies of the scoping
3 document as you'd like, and a reminder that the date of July
4 23rd, if you would like to file comments in writing, please
5 do so by that date, and stay tuned because there will be
6 additional meetings scheduled and you may want to attend
7 those.

8 MR. BROWNING: I just had a quick question. She
9 brought the flood plain -- you said Toll Bridge Road gets
10 covered?

11 MS. HIGGINSON: Toll Bridge Road does go under
12 during some of our -- here's a resident who knows.

13 MS. HOLMES: It does go halfway over the road,
14 Toll Bridge Road. There have been times when she would have
15 been driving in the right lane and had to use the left lane
16 because it's underwater on the right side. It's not so deep
17 that I couldn't drive through it.

18 Also, snow covers it halfway when the water comes
19 in, freezes. I just never thought about it until that was
20 brought up; I guess I'm used to it.

21 MR. KARTALIA: Could you please give your name so
22 the court reporter can get that?

23 MS. HOLMES: Marie Holmes.

24 MR. KARTALIA: Thank you.

25 MS. HOLMES: And now that I've been exposed, I

1 guess -- I am probably the largest property owner on the
2 Eastport side. I have a great deal of waterfront along Half
3 Moon Cove, and -- I will send in a request for a study. And
4 I guess I haven't been too concerned, because I don't see
5 financially how it can be done unless Tidewalker has
6 investors that I don't know about, and I think the State is
7 having great budget problems, the federal government is
8 having budget problems. I don't see them contributing.

9 But on the other hand, I hadn't thought about the
10 fact that you will have to park cars, and perhaps I could
11 have rent parking areas.

12 (Laughter)

13 So for every project, there are disadvantages and
14 I guess there are advantages.

15 MR. KARTALIA: Sure.

16 MS. BOWMAN: I want to thank the members for
17 coming and giving an opportunity for this project to go to
18 the next phase so that we can look at all the issues,
19 because we were working on this on our own; and it's a good
20 project, but will it ever happen. So I am really glad that
21 Normand was able to file the PAD and get us to a point.

22 In many ways we feel we feel like we're opening
23 the door to the community to embrace this project if it's
24 something that they think that we feel that can serve this
25 community, because it is a source of energy that will be

1 reliable, and it's something that will put us on the map.

2 Oh, and I have to pull this up since I'm up here.

3 This is the map of Maine by MaineBiz, a magazine
4 out of Portland, in 2024. It has nothing happening in
5 Washington County, which is fine for us who are looking to
6 retire soon; but when we're looking at the next generation,
7 what is going to be in this area that will help support this
8 next generation, which is something we're looking at.

9 So I thank FERC for starting this opportunity to
10 discuss it, and we look forward to the next five years
11 working with you. Thank you.

12 MR. KARTALIA: Would anyone else like to comment,
13 or ask a question?

14 MR. DEVOTO: I'm Mark Devoto. I'm just wondering
15 where the breach is expected to be? Is it between Carlow
16 and Pleasant Point or between Carlow and Kendall Head?

17 MS. BOWMAN: Pleasant Point.

18 MR. DEVOTO: Okay, that's all I need to know.

19 MR. KARTALIA: Thank you.

20 Any others?

21 (No response.)

22 Well, thank you very much for attending. We're
23 adjourned.

24 (Whereupon, at 8:10 p.m., the scoping meeting
25 concluded.)