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BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

- - - - -x
IN THE MATTER OF: : Docket Number
PENNAMAQUAN TIDAL POWER PLANT PROJECT : P-13884
- - - - -x

Pembroke Elementary School
36 U.S. Route 1
Pembroke, ME 04666

Thursday, October 25, 2012

The above-entitled matter came on for Scoping Meeting,
pursuant to notice, at 6:00 p.m., Nicolas Palso,
FERC Moderator.

1 PROCEEDINGS

2 MR. PALSO: All right. Good evening,
3 everyone. Can you hear me well?

4 (Chorus of 'no.')

5 MR. PALSO: No?

6 Is this on? Ah. There we go.

7 Okay. Good evening. Thank you for coming
8 to our meeting. I'm glad we have such a --

9 (Chorus of 'It's not on.')

10 MR. PALSO: Is it on? Yeah. It's
11 slippery. So I'll just hold that.

12 Thank you very much for showing up. I'm
13 glad we have such a good turnout here. This is the Federal
14 Energy Regulatory Commission's meeting, or scoping meeting,
15 for the Pennamaquan Tidal Power Plant Project.

16 Just to give you an idea of our agenda
17 today, or tonight, we'll start with an introduction; then
18 we'll describe FERC's prefiling process for the hydropower
19 project, which is what this scoping meeting is part of.
20 We'll describe what scoping is. We'll have Pennamaquan
21 Power come and give a project description. As you can see,
22 they have a very large model of their project there.

23 Then we'll describe requests for
24 information and studies. And at the end we'll take comments
25 and questions. So if you have any comments or questions,

26

1 just hold on to them and at the end we'll have a big session
2 where everybody can let themselves be heard.

3 First off, please -- I think everyone's
4 been doing it, but please make sure you sign in. The
5 sign-in sheets are over there. And please indicate if you
6 plan to make comments because that will let us plan how many
7 people are going to have comments and how much time we can
8 give everyone tonight.

9 Also, there's a court reporter for this
10 meeting who will be recording everything we're saying. So
11 when you do speak, please state your name and your
12 affiliation. Spell your last name if it's something that
13 people may misspell.

14 And please speak into the microphones we
15 have. There's one up here and there will be one going
16 around the room, probably. So that way we can make sure
17 everything's on the record. And this will all then be put
18 up on FERC's website in about two or three weeks, all the
19 transcripts of the meetings up there.

20 Comments on the project -- an important
21 date. If you want to file any comments through FERC they
22 are due on November 13th. Any comments you make here on
23 your, you know, verbal, they'll be as good as any written
24 comments you might submit. We put these all together.

25 But if you go on www.ferc.gov, you'll see
26

1 there will be an area where you can submit comments. And it
2 will explain there exactly what -- you know, you put the
3 project number -- it's number P-13884. And write your
4 comments on and those will all pop up. And everybody who
5 subscribes to this will see those.

6 You can also at ferc.gov go on the mailing
7 list if you wish to receive mailings about it. And then our
8 eSubscription and eLibrary is on there. The eLibrary is our
9 record of all of the documents relating to this Pennamaquan
10 project so far, and all the ones in the future will be put
11 there.

12 And if you eSubscribe you can have these
13 automatically sent to your mailbox every time something pops
14 up. And you can also then go through the history on
15 eLibrary. If you want to stay up to date on the project you
16 can go to www.ferc.gov and sign up for it and everything
17 will be delivered right to your computer.

18 Now how many people here have heard of FERC
19 before you saw the advertisement for this project? Not too
20 many people.

21 Just to give you an idea of who we are,
22 FERC is an independent agency. We're affiliated with the
23 Department of Energy but we're pretty much on our own. Our
24 job is to ensure energy rates and delivery is reasonable --
25 such as natural gas and oil transmission and electricity.

26

1 We also regulate development of energy
2 infrastructure -- natural gas pipelines is one -- and then
3 the reason we're here is hydropower projects is another.
4 And basically we hope to make sure that the lights stay on
5 and everyone gets electricity and that they don't have to
6 pay too much for it.

7 Regarding hydropower licensing -- that's
8 our job here -- we want to maximize the benefits that can
9 come from hydropower. All non-federal dams need a FERC
10 license to operate. Those are usually the dams you haven't
11 heard of. Hoover Dam is a federal dam; we're not involved.
12 But all the ones run by states, municipalities, or private
13 companies, they'll need a FERC license.

14 Our licenses set the operating conditions
15 for these hydropower projects. It includes protection for
16 environmental resources, recreation, historic or
17 archeological structures. So the licenses like, you know,
18 lays out everything that the applicant needs to do. And we
19 put in there the things that will help to protect the
20 environment and, you know, limit or we hope reduce any bad
21 effects that the project could have.

22 These licenses are developed through the
23 NEPA process. And NEPA stands for the National
24 Environmental Policy Act. And this is a process that all
25 federal projects need to go through where we evaluate what
26

1 kinds of environmental effects a project could have and
2 determine if, you know, the effects are too heavy or if
3 there's a way to mitigate them.

4 Our team here -- I'll let them introduce
5 themselves.

6 First off, I should have introduced myself
7 earlier. I am Nick Palso. I am the coordinator for the
8 project. I'm also doing the terrestrial biology for the
9 project.

10 MS. DAVIDSON: I'm Samantha Davidson. I'll
11 be doing the recreation and cultural aspects of the project.

12 MR. KARTALIA: My name is Steve Kartalia.
13 I'm a fisheries biologist with the Commission.

14 MR. PALSO: And we are all out of
15 Washington, D.C. We are very glad to be up here in Maine.

16 But this team and some several others who
17 weren't able to make the trip will be performing the
18 environmental analysis on the project. Our analysis results
19 in the environmental assessment, which is a very long
20 document which analyzes the effects that the project could
21 have on the environment and make recommendations to protect
22 resources. And these recommendations then would go into a
23 license if the license was going to be issued.

24 My team here, we do not grant the license.
25 The license is granted by the Commissioners. It's a group
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1 of five back there in Washington, D.C. So we don't get to
2 say yes or no to a project.

3 And to also make it clear: FERC is neither
4 for nor against any hydropower projects. We're neutral in
5 this. We just want to do the environmental analysis.

6 This complicated chart is our integrated
7 licensing process. These are the pre-filing steps. For the
8 project license -- this is a several-year long process. We
9 don't take this lightly. And right there, we're in one of
10 the very first steps.

11 So the applicant filed their
12 pre-application document on July 19th. We sent out a
13 scoping pad, our scoping document and scoping notice that
14 let everyone know about this meeting that would be coming
15 up. And we're here now at the scoping meeting. And things
16 will just continue.

17 And they'll be doing studies probably in
18 2013 and maybe in winter of 2015 or later is when they will
19 actually get around to submitting their license -- I'm
20 sorry, their license application. And then there's a whole
21 process where we review their license application. So this
22 is a many-year process, and we're just at the very start
23 here.

24 So the scoping, the whole reason we're
25 here, the scoping process is when we come out and try to
26

1 solicit input and comments from the public, from agencies,
2 from anybody who has any interest in this project. We want
3 to identify the issues, find out about the existing
4 conditions and information needs.

5 We can only do so much research in
6 Washington, D.C., and we really rely on the public to give
7 us the local knowledge and the expertise. Maybe you can
8 come in and tell us, you know, about this area. You can
9 also identify, you know, environmental effects that we may
10 not be aware of. So it's very important for us to come out
11 and get your input.

12 The different resource issues that we
13 analyze as part of this scoping issue is geologic and soil
14 resources, looking at how much sedimentation a project might
15 kick up. It's a good example.

16 Aquatic resources -- there's a lot for
17 that. We look at water quality, water temperature, how
18 dissolved oxygen is in the water. We also look at the fish,
19 the mollusks, everything that lives in the water, because
20 for hydropower projects of course water is a major issue.

21 We'll also inspect the terrestrial
22 resources -- that's plants, wetlands, everything that
23 breathes air.

24 Recreation and land use is another
25 important thing. We want to see how projects might affect
26

1 recreation activities like swimming or kayaking or canoeing.
2 We want to make sure that those activities are protected.

3 We also look at aesthetic resources, things
4 such as lighting and how the project is going to appear
5 close up and from a distance, because that's all taken -- we
6 consider that part of the environment. So the appearance of
7 the project is important.

8 Also important are cultural resources.
9 These include archeology, like ancient Native artifacts or
10 sites. And it also can include more recent historical
11 structures. And those are things we analyze. And also
12 developmental resources, such as how it will affect the
13 economy.

14 MS. BUROW: Excuse me. Can I ask a
15 question?

16 MR. PALSO: Sure. Could you --

17 MS. BUROW: Is there any kind --

18 MR. PALSO: Just hold on. We'll get you a
19 mike. And please state your name.

20 MS. BUROW: Thank you.

21 Is there any -- Is it on?

22 UNIDENTIFIED PARTICIPANT: It's on.

23 MS. BUROW: Is there any kind of resource
24 that's listed that talks about the government agencies that
25 would be drawn upon to review this and survey the activities
26

1 after operation starts? Is that included in your plan?

2 MR. PALSO: Yes. We have a -- there's a
3 whole branch at FERC -- it's our Department of Hydropower --
4 we call it DHAC -- What does that stand for?

5 MR. KARTALIA: Administration and
6 Compliance.

7 MR. PALSO: Department of Hydropower --
8 Yeah. And they make sure -- they check the whole length of
9 the license to make sure that everything is being followed
10 to the license.

11 MS. BUROW: So when you license do you give
12 them a schedule that says every so often you have to do this
13 or that or something like that? Is that a commitment?

14 MR. PALSO: Yeah.

15 MS. BUROW: Okay.

16 MR. PALSO: For stuff like that. I don't
17 know if it's actually every so often, but they have to file
18 reports about various things. And the agencies can also
19 work with us to develop plans for that.

20 MS. BUROW: Thank you.

21 MR. PALSO: Would you identify yourself?

22 MS. BUROW: Romantha Burow.

23 MR. PALSO: And at this time I'll have
24 Pennamaquan Tidal Power come up and give a description of
25 their project so you can all get a great idea of what we're
26

1 talking about here.

2 MR. ATIYA: I'd like to thank Dr. Palso and
3 the team from FERC for coming here.

4 I'm very pleased and gratified that so many
5 of you are here at this meeting.

6 Let me introduce our financial officer, Ted
7 Farrell.

8 I'm Ramez Atiya. That's R-a-m-e-z. And
9 the last name is Atiya, A-t-i-y-a. It's an Egyptian name.
10 I am -- This is my adopted country. I've been here longer
11 than most people have been here.

12 So without -- Let me just go ahead then
13 and All right.

14 The Pennamaquan Tidal Power Project is a
15 tidal range power project. What we do is we use the
16 difference in water levels in the tides to generate power.
17 I'm going to speak over there.

18 We made a model of the tidal power plant
19 and this will help us understand how this works.

20 Can you hear me all right?

21 UNIDENTIFIED PARTICIPANT: No.

22 MR. ATIYA: You can't hear me?

23 UNIDENTIFIED PARTICIPANT: No. It's not
24 on.

25 UNIDENTIFIED PARTICIPANT: That is not a
26

1 mike for the auditorium; it's just for the reporter.

2 UNIDENTIFIED PARTICIPANT: This is on.

3 UNIDENTIFIED PARTICIPANT: There's a mike
4 at the podium there.

5 MR. ATIYA: Oh. It's the mike on the
6 podium. Okay.

7 UNIDENTIFIED PARTICIPANT: Can you stand
8 here and have him direct?

9 MR. ATIYA: We can try.
10 Is there one? Because I need to be at the
11 table there.

12 MR. PALSO: No, the wire is stuck there.

13 MR. ATIYA: Let me see if I can I can try
14 to speak loudly.

15 This is a model of the tidal power plant.
16 It consists of four powerhouses. The four powerhouses have
17 turbines at their base. These turbines are ten feet in
18 diameter in terms of the runner. So it gives you some idea
19 of the scale.

20 These are sluices over the turbines. And
21 they will be operated by opening or closing gates. So the
22 way the tidal -- and there's one of these for each one of
23 the sluices. We just made a representative model of our
24 gates. And actually our gates are not -- these kinds of
25 gates, they don't go straight up; rather, what they do, they
26

1 more work like a garage door so that they don't stick way up
2 in the air.

3 But here is the way the plant operates.
4 Basically all the gates are shut. The tide here rises from
5 mean water to a higher level. There is -- no water is
6 flowing from -- Let's say this is the Cobscook Bay side;
7 this is Pennamaquan River. This is the Hersey side. This
8 is the Latent side. This is a model of the sea floor.

9 So when the tide rises on the side, the
10 tide -- the water then is higher on this side than on that
11 side. When it's sufficiently high the gates open; it allows
12 water to flow through the turbines and generate power.

13 Then the gates then close. We actually
14 have also a pumping cycle at this point where in order to
15 raise the water higher up -- I'll talk about the cycle
16 briefly. But the whole cycle is then reversed. As the tide
17 -- the gates are closed, the tide on this side falls; the
18 water on this side is higher than on this side; the gates
19 open and we generate more power.

20 Then we also have a pumping cycle at the
21 end of this to make sure that the water rises and falls to
22 the natural levels -- to their natural levels in Pennamaquan
23 River. So we don't want to affect the natural high tide and
24 low tide levels in the basin.

25 So this consists of four powerhouses, 16

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1 turbines. And then what it has, it has wall elements here.
2 These are about nine feet, ten feet in width. So therefore
3 this is a narrow structure.

4 There are two issues that come up -- that
5 have traditionally come up that are problematic for tidal
6 range power. Tidal range power now has been around for
7 roughly 100 years. It's the first -- it was the first
8 renewable. And the reasons it has not gotten off the ground
9 are two-fold:

10 One has been the cost of the civil works,
11 which are very high. The second have been the negative
12 environmental impacts because of the way the turbines are
13 operated.

14 The problem -- what we developed is we
15 developed a pile-supported system that allows us to reduce
16 the size of the components. Typically, rather than having a
17 wall here, what you would have is you would have a caisson
18 that would be -- a caisson is a reinforced concrete box --
19 that would be perhaps 150 feet. Either that or an
20 embankment. And an embankment has a very large base. And
21 so these are massive elements.

22 So by using a pile-supported system what we
23 are able to do is we are able to reduce the size of these
24 elements dramatically. And in doing that we in fact reduce
25 the costs. So we have a reduction in size here of about 90
26

1 percent, essentially, because of the pile support.

2 Now there are some inclined piles here.

3 But let me just show you how basically this works.

4 A socket is drilled into the rock -- and
5 this is maybe of the order of 12 feet to 15 feet. The pile
6 has a round base -- the support column has a round base. It
7 is then inserted in here and the elements, the wall elements
8 are then secured to the support columns.

9 And so what this does is it allows us to
10 reduce the dimensions. And this involves an enormous cost
11 savings. This kind of construction, which is made possible
12 by in fact large piling methods developed by offshore oil
13 and gas, allow us to cut the cost of construction by about
14 50 percent.

15 So we end up with a cost-effective
16 technology.

17 The other part of this are the negative
18 environmental impacts. And the negative environmental
19 impacts fall into three categories.

20 And I suppose I should follow my PowerPoint
21 presentation here.

22 MR. SOHNS: I'm Leo Sohns. And I want to
23 -- hello. I'm Leo Sohns. And I would like to know what the
24 potential power of this unit is in relation to Churchill
25 Falls in Newfoundland and Quebec Hydro up in Hudson Bay.

26

1 This is a little baby.

2 MR. ATIYA: That's right.

3 MR. SOHNS: This isn't even one thousandth
4 of what Churchill Falls produces.

5 MR. ATIYA: It's --

6 MR. SOHNS: And so for one-thousandth of --
7 a little bitty power an estuary is going to be destroyed.

8 MS. DAVIDSON: Sir --

9 MR. SOHNS: Have a good day.

10 MS. DAVIDSON: I think he's about to come
11 back and address all of that.

12 MR. ATIYA: Let me address those issues
13 because I think --

14 MS. DAVIDSON: Well, how about come over
15 here and speak into this so everybody can hear you.

16 MR. ATIYA: The destruction of an estuary
17 is precisely, you know, the issue that we felt we had to
18 deal with. There were two issues. One, as I said, is the
19 cost of the construction which made tidal range power too
20 expensive. The other were the environmental issues.

21 So let me just proceed quickly through
22 here.

23 Here is a layout of the plant. There are
24 the four powerhouse caissons, the wall panels, the support
25 columns.

26

1 Are there any questions about the
2 construction of it?

3 Yes.

4 MR. PALSO: Let's try to keep the questions
5 to the end.

6 MR. SOHNS: Does the screen go up any
7 higher? All these chairs are flat. Can that screen there
8 go up any higher?

9 MR. PALSO: No, that's as high as it goes.
10 Sorry.

11 MR. ATIYA: I'll try to make up for it --

12 MR. SOHNS: Thank you.

13 MR. ATIYA: -- by trying to explain maybe a
14 little more clearly.

15 UNIDENTIFIED PARTICIPANT: There are more
16 seats in the front.

17 MR. ATIYA: And there are more seats in the
18 front.

19 MR. CURTIS: Larry Curtis. Pembroke
20 resident.

21 I was wondering how high the walls would be
22 to the average sea level. That's all I was wondering

23 MR. ATIYA: Okay. Well, let me give you a
24 -- the average sea level, the mean water level is about 20
25 feet below the top of those caissons there. So it basically

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1 sticks up like a two-story house.

2 Now the wall section, which is the longer
3 section of the project, is lower than that. And at the very
4 -- at high spring tides that wall section becomes entirely
5 submerged. So it sits quite low in the water.

6 Now also I need to add that all of these
7 elements here, including the wall elements and these
8 caissons, they're all floatable elements. And so nothing
9 comes by road; everything comes by water. What they are is
10 they're floated in and set in place along the sea floor.

11 This is the proposed layout of the plant.
12 What we would like to do is we would like to purchase R.H.
13 Foster property there and to take out the tanks, landscape
14 that parcel and make it into something aesthetically
15 pleasing. The other side would abut on probably Ann Ray's
16 -- on that area. We need to work all of that out.

17 Yes.

18 MR. PALSO: No, we'll take questions at the
19 end. Just write it down. We'll get to you.

20 MR. ATIYA: Okay.

21 As I said earlier, one of the main issues
22 that has in fact prevented the development -- these are more
23 recent issues that have prevented the development of tidal
24 range power have been the negative environmental impacts.
25 And the negative environmental impacts fall into basically

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1 three categories.

2 One is the loss of inter-tidal habitat.
3 Most operating cycles actually involve changing how high and
4 low the water rises and falls within the basin. So the
5 other are sedimentation, and thirdly are fish issues and
6 passage through the turbines.

7 So it was apparent to us that in order to
8 really move forward with this technology we needed to
9 resolve the critical issue here, which was the issue of the
10 inter-tidal zones. So we developed an operating cycle which
11 we worked out with Alstom Power, the largest turbine
12 manufacturer in the world, to develop a cycle which in fact
13 reproduces the rise and fall of the tides within the basin.

14 And so the blue here represents the natural
15 rise and fall. The purple here represents the -- so this
16 would be in Cobscook Bay. This would be in Pennamaquan
17 River. And you can see the rise and fall of the tides in
18 Pennamaquan River closely follows the rise and fall of the
19 tides in Cobscook Bay.

20 So essentially what this does is it shifts
21 the tide -- it shifts the tide -- the timing of the tide,
22 but it doesn't substantially change it.

23 The advantage of such a cycle is -- an
24 additional advantage of such a cycle is that it preserves
25 the energy in the water and therefore produces no net
26

1 sedimentation.

2 The electrical output of -- what we project
3 is we project an output of about 80-, 87,000 megawatt hours.
4 And that's about 14 -- that's the equivalent of 14,000
5 households.

6 The project itself has a lifetime of 120
7 years-plus. And so from the economic point of view -- from
8 an economic point of view, the first 30 years -- for the
9 first 30 years of operation when the debt is being paid on
10 the project we have an approximate cost of production of
11 about eight cents per kilowatt hour. Once this is paid then
12 the cost of production drops dramatically and it falls below
13 the cost of power from any source whatsoever, natural gas,
14 coal, anything else.

15 Secondly, we felt that it was -- we
16 addressed fishing questions. We have a lock built into this
17 model, and I can explain it to you in more detail.

18 Dr. Palso here is telling me that I have to
19 move on. So I will go through this quickly.

20 A lock -- we have a lock that accommodates
21 60 by 20 foot boats. We can increase that width. The
22 inter-tidal flats are unchanged in terms of harvesting. The
23 footprint of the garage is less than one acre. And so we
24 have access in and out.

25 And so what we're doing is we're taking one
26

1 acre of sea floor out of commission, and the rest of it will
2 be open to fishing and harvesting exactly as it would be
3 now.

4 We worked to decrease the fish passage
5 through the turbine. And we in fact calculated fish
6 survival rates in passage through the turbines. And for
7 rainbow smelt, for the species -- We actually calculated
8 them for a species of concern. For smelt they're like 98
9 percent. For elvers they're 99 percent. For large eels
10 here -- and these are up to -- we didn't write this, but
11 they're up to 100 -- 30 inch eels, 35 inch eels, the
12 survival rate is about 90 percent or higher.

13 There is an issue of marine mammals. If,
14 as we need it, we may need to place trashracks across the
15 turbine entrances in order to make sure that marine mammals
16 do not actually get into the turbines.

17 I'm going to go over here so you'll just
18 have to -- we'll just have to make do.

19 These are sluiceways, and they're opened
20 four times a day at the end of each generating cycle so that
21 marine mammals can pass through here. If necessary, we will
22 put gates across just the turbines to make sure that we
23 don't have entrainment of marine mammals.

24 Now we're not sure exactly what the
25 situation is with marine mammals or whether they're smart
26

1 enough simply to avoid the turbines. They may well be.

2 We'd just like to say a few things about
3 the economic benefits to the community of such a project.
4 It would certainly be the single largest source of tax
5 revenues in Pembroke, and it would decrease tax rates
6 significantly here.

7 From the point of view of employment, we
8 anticipate that the maintenance and operation of the plant
9 is about \$900,000 annually, with about half to two-thirds of
10 that going to direct local employment. So we anticipate
11 that it would at least create ten to fifteen jobs, permanent
12 jobs, as an absolute minimum.

13 Another aspect of this is tourism.
14 Annapolis Royal, just up the bay, draws about 35,000
15 tourists per year. And so if the community decides that
16 this is something that they would like to encourage, you
17 know, we would also encourage and develop tourism. And that
18 would be a further infusion of money into the economy of the
19 area.

20 This would also provide long-term stability
21 in that this project would last 120-plus years. And so it
22 would be a source of revenue for Pembroke longer than any of
23 us are likely to be around.

24 Finally, there are the architectural and
25 aesthetic aspects of the project. This is something that we
26

1 are concerned with because obviously this is a very
2 beautiful place. And the -- So the wall part sits, as I
3 said 13 feet above mean water level. At very high tides it
4 becomes submerged.

5 The powerhouse sits about 20 feet above
6 mean water level. And what we'd like to do is cement
7 actually -- one of the suggestions: We'd like to do this
8 aesthetically. So would have all sorts of options. I mean
9 cement can be cast, for example, to look like stone so that,
10 you know, all of this can look like stonework.

11 And I'm going to have to move here again.

12 So the water levels look something like --
13 about those. We would propose to make this look like -- in
14 sort of traditional Maine construction where we could put,
15 for example, a bridge here that -- I won't put the whole
16 thing together; I'll just do it like so.

17 That would be a narrow footbridge about ten
18 feet side. It could be made to have -- it could be made in
19 the form of a covered bridge. We could place traditional
20 frame construction over this, which would house displays and
21 allow people to come in onto the barrage.

22 So, you know, we are concerned about the
23 aesthetics and then working that out with the community.

24 I'd like to put this project in a bigger --
25 in the bigger picture. What we have tried to do is we have
26

1 tried to make this into a low impact hydropower. In fact,
2 tidal range has been around for quite a long time. The
3 potential in terms of -- the barrages that were designed as
4 of 1960 would have provided roughly about seven percent of
5 today's total power consumption.

6 With this sort of construction methodology
7 we can build shore-connected lagoons. We don't -- these are
8 lagoons that, if this is the shoreline here, the lagoon
9 would be enclosed by a semi-circle. So we can place these
10 on any shore; that leaves the channel open for navigation.
11 These sorts of lagoons increase the number of potential
12 sites by probably a factor of five.

13 And so this technology has the possibility
14 of producing somewhere between 15 and 30 percent of the
15 world's and global energy consumption. It can make a major
16 contribution towards halting global warming and ocean
17 acidification. So the environmental benefits of this kind
18 of a project are enormous. And, you know, this is
19 protective of the oceans. And to a community like this,
20 which is, you know, concerned with ocean issues, this can
21 make a significant difference.

22 So with that, let's go ahead to questions.

23 MR. PALSO: Not quite yet, but in just a
24 minute. I'll finish it up and then we'll have --

25 MR. ATIYA: Oh. Okay.

26

1 MR. PALSO: Yeah. We'll get to questions
2 in just a minute. I just want to finish up here so that
3 we'll have nothing else to go through.

4 And I'm sure many of you have thoughts and
5 questions and he'll get to describe the project in a lot
6 greater detail to answer your questions and comments.

7 Just a reminder: If you have any comments
8 or requests for information and studies, these are due on
9 November 13th. Clearly identify on the first page when you
10 send in comments that it's for the Pennamaquan Tidal Power
11 Plant Project, and that's number 13884-001. That makes sure
12 that we know what project you're referring to. They can be
13 filed electronically on the internet when you go to
14 www.ferc.gov.

15 Or you may mail them into FERC. Our
16 address is at the bottom and it's also in the scoping
17 document and on our website. I'll give you a second to
18 write it down; I see some people writing. But you can also
19 look in your scoping document.

20 I'll just skip over this quickly. We're
21 just saying that we're looking for information that helps
22 define the geographic extent of the project; any information
23 that would help describe existing environmental effects;
24 identify any resource plans that we may not be aware of;
25 show why resources should be excluded from further study or
26

1 why they should be studied; and study requests that help
2 provide a framework for collecting information that the
3 applicant will then go and research over the next one or two
4 years to find out what could be affected by the project.

5 There's particular study request criteria
6 we look for when we plan these requests. This is all in the
7 scoping document in Appendix A. So there's copies up front;
8 it's available online. You can look there. And please, if
9 you're going to make a study request, please follow these
10 criteria because we require them to craft our studies. You
11 don't need this if you're just making a comment.

12 Important dates to remember for this
13 project: Again, comments are due November 13th. The
14 applicant will have the proposed study plan on December
15 28th. That's going to be he puts together all the studies
16 that he's received, you know, from people like you, from
17 different agencies, from us.

18 Then a month later, on January 27th, there
19 will be a study plan meeting where various agencies get
20 together and discuss these study plans. Then the applicant
21 may revise the study plan for things that weren't included
22 that the agencies or FERC or the public wanted.

23 And the study plan will be determined by
24 FERC, the director of our office, on May 27th. So then
25 those will be the studies that the applicant will need to
26

1 perform to get the information we need to see what the
2 environmental effects of this project will be.

3 I'd like to thank Pembroke Elementary and
4 the Selectmen of Pembroke for allowing us to use this
5 gymnasium. There weren't many places to pick in town, and
6 we wanted to have this meeting as close as possible to the
7 project.

8 We'll be having an agency meeting tomorrow
9 in Bangor at the DEP headquarters there. We have that one.
10 It's still open to the public. We have one during the day
11 so that members of different environmental agencies are able
12 to attend during their work hours, and just like we have one
13 in the evening so that you are all able to attend after
14 work.

15 We'll now open it up for questions and
16 comments. It looks like we have ten to fifteen people that
17 want to make comments. There may be more after the
18 presentation. Please remember, really important, as you've
19 seen tonight: Please talk into the microphone. Sam will be
20 going around with the microphone. You won't get recorded if
21 you don't speak into it. And please, before you talk, state
22 your name, your affiliation, and spell your name if it's
23 something people have trouble spelling. And make sure you
24 do that first.

25 I expect most of you will have questions
26

1 for Ramez and Pennamaquan Tidal Power. So I'll let him come
2 back up here and address those. If you have a question for
3 me or anyone else, just let us know at the beginning of your
4 question and we'll get up here.

5 And we'll try to limit each person, each
6 question to about five minutes, and we'll see how much time
7 we have. We just don't want to be here too late tonight and
8 want to make sure that everybody gets to be heard.

9 DR. SANFILIPPO: My name is Stephen,
10 S-t-e-p-h-e-n, Sanfilippo -- one word --
11 S-a-n-f-i-l-i-p-p-o. I am a property-holder in Pembroke and
12 I occupy a home here with my wife seasonally.

13 I have a few questions, and I'm just going
14 to ask them quick and then sit down.

15 First of all, November 13th as a time
16 cut-off for comments, most of us didn't find out about this
17 until yesterday or today. Most people here put in an eight
18 to twelve hour workday. We're also involved now with
19 changing over from our summer mode to winter mode. That's a
20 lot of work. Could that possibly be extended?

21 MR. PALSO: I can answer that right away.

22 In that case you can write in and request
23 an extension. Just go to the FERC site like you normally
24 would and just ask, you know, if you may have more time.

25 DR. SANFILIPPO: Individually.

26

1 MR. PALSO: Yes.

2 DR. SANFILIPPO: Okay.

3 Politically, at least one of the major
4 parties is talking much about deregulation, including the
5 abolition of the Department of Energy. I'm concerned about
6 that. I'm concerned, because I grew up six miles from the
7 Shoreham Nuclear Power Station, about incomplete projects;
8 what happens if at some point this project cannot be
9 completed, what are we left with?

10 I am concerned about the economic promises.
11 Lower cost of electricity of a few cents, that has been
12 promised many places across the nation. The price always
13 goes up far more than was promised, particularly with
14 inflation and other considerations.

15 And I'm also concerned with the tidal
16 effects on neighboring waters. If tide is held out of the
17 Pennamaquan estuary, what happens to -- that water's got to
18 go someplace. Nature thinks it should be coming in. Where
19 does that water go? It's going to go into the head of the
20 tide area, into the Hardscrabble-Dennysville River area;
21 it's got to be raising tidal levels at that point.

22 Thank you.

23 MS. DAVIDSON: I think maybe in the
24 interest of time, just let everybody talk.

25 MR. ATIYA: Oh, sure. Okay.

26

1 MS. DAVIDSON: Take notes.

2 MR. ATIYA: Sure.

3 UNIDENTIFIED PARTICIPANT: Maybe we can get
4 a recital of what some of these questions are at the end.
5 It's tough to take notes. That speaker had several
6 questions. I wasn't able to do that for all of them.

7 MS. BUROW: My name is Romantha Burow,
8 R-o-m-a-n-t-h-a B-u-one r-o-w.

9 I have a number of concerns that I've
10 already talked to Mr. Atiya about. The survival of the
11 marine life. Specifically I'm concerned about the studies
12 and the length of the studies that will be done for the
13 basin.

14 I'm interested in Mister or Miss Marine
15 Life Study Person for FERC to include local residents in
16 some of it because I heard somebody behind me say, 'I've
17 never seen a seal in that basin,' and I've seen them
18 numerous times. And I've seen a whale in Hersey Cove, even.
19 Especially the study should be based on -- to include
20 seasonal runs of fish for the marine mammals to be following
21 them. It happens all the time there, but you just don't see
22 them that often.

23 The next thing I'm concerned about is
24 sedimentation, specifically the ditching and dredging, what
25 time it's going to be done during the tidal cycle. I live
26

1 on Hersey Cove, which is one of the best clam coves -- or
2 it used to be until they used it to seed other sites in the
3 area. And I'm very anxious that that not be ruined for some
4 of the friends and neighbors of mine who make their living
5 by clamming in that cove.

6 Sedimentation in the ditching and dredging,
7 and also during local violent climate events like this past
8 weekend. We had six inches of water drop on my point. I
9 had empty buckets and I -- between Friday night at 6:00 p.m.
10 and noon the next day, there was six inches of water that
11 just dumped and was feeding the land and feeding that. Is
12 the operation of the system going to include opening
13 everything wide open so that the sediment does not sit in
14 that basin and it will be allowed to go clear through.

15 Finally, sedimentation that's caused by
16 ocean currents and wind-driven wave action. Anybody here
17 who lives on the coast knows if you put a stop -- you know,
18 a pier or something in the way of a wave it's going to wash
19 around and scour -- sometimes scour directly in front of
20 that area and sometimes it scours around it.

21 We have southwest winds here pretty often
22 that are very extreme and not always predicated by the
23 meteorological people. And therefore that Hersey side, the
24 in-board Hersey side tidal wall there's going to be scouring
25 or something happening on that side.

26

1 And also our northeasters are going to be
2 hitting the Latent Point tidal wall on the other side.
3 There's, you know, significant things that are going to be
4 happening when, you know, our local climate is active.

5 Small boat access. I think the lock should
6 be closer to the powerhouse caisson so people have access at
7 a low, low tide rather than, you know, higher tides. I
8 think that, you know, people who have fished here for
9 hundreds of years should have access to that river at
10 whatever tide they want. And locating the lock in a
11 different place might not hurt that much.

12 Also, I think that if this plan goes
13 through we need an absolute commitment from some agency in
14 the state to follow up first of all, that the plan is -- I
15 mentioned this a little bit when asking the question from
16 FERC about resources. We need a commitment that there are
17 going to be periodic studies to make sure that what is
18 promised is done; and if it's not, then shutdown occurs. Or
19 if shutdown does happen because the bottom line is not
20 profitable for some reason, they do nuclear fission in the
21 future, that it's all cleaned up properly and the area is
22 cleared properly.

23 MR. HOLD: Trevor Hold, H-o-l-d, a resident
24 of Pembroke.

25 I have a question of the time change in the
26

1 tides. You showed the graph of ocean-side versus
2 basin-side. How much difference is that time frame?

3 Are you also part of the Half-Moon Cove
4 Project, or separate?

5 MR. ATIYA: Separate.

6 MR. HOLD: Okay.

7 And Ocean Renewables, that's also a
8 separate entity, is that correct?

9 MR. ATIYA: Yes.

10 MR. HOLD: In this type of a project is the
11 -- my understanding is that it isn't -- but the power
12 production, is it constant or does it change as the tide
13 ebbs and flows?

14 MR. ATIYA: It's non-constant.

15 MR. HOLD: Okay.

16 Now I know with the wind turbines and
17 things here that there is legislation in place that when the
18 wind is blowing the power companies have to purchase their
19 power to do it. Is this going to -- Is the same legislation
20 in place for this type of a project, or will legislation
21 have to be put in place so that when you are producing power
22 that it is sold into the grid? And will that type of
23 legislation put a burden on the rate-payer as it does with
24 wind?

25 And as part of this project -- well, first
26

1 off, I should have said this right from the beginning. I
2 want to thank you very much for looking here at Pembroke and
3 wanting to place a project like this and look at some type
4 of development here.

5 As a native of the area, there hasn't been
6 enough development looked at, and what has been has been put
7 down way too much. I think that your approach so far that
8 I've seen, you want to produce something that we all need
9 and you want to do it in an environmentally sound way. And
10 I appreciate that.

11 MR. ATIYA: Thank you.

12 MR. HOLD: That being said, I know there
13 are other areas -- Monson, Maine is one place that comes to
14 mind that has a special electric rate that they did when
15 they produced that power on their power grid. And they have
16 a company there called Backyard Farms that makes tomatoes,
17 hydroponic. It's a high consumption of electricity. And
18 the way, you know, that industry is there specifically
19 because the power is there.

20 And this may be an avenue that the project
21 can look at to bring another industry in along with this if
22 the power is cheap enough.

23 Thank you very much.

24 MR. ATIYA: Thank you.

25 MS. DE VANEY: My name is Kim DeVaney. My
26

1 last name is spelled D-e-V-a-n-e-y. I'm a resident of
2 Pembroke.

3 I think we would kind of like to know where
4 the headquarters for your corporation is. I think that some
5 of us might be interested in why it is that you found our
6 little place and decided to do a project here. I think
7 we're -- I assume that you do not live here or intend to
8 live here. Is that correct?

9 MR. ATIYA: No. In fact, if it --

10 MS. DE VANEY: You intend to live here?

11 MR. ATIYA: If this project comes here I
12 would have to move here for a significant amount of time,
13 possibly permanently. I mean this is a wonderful area. I
14 think one could do a lot worse than this area. This is a
15 beautiful spot.

16 MS. DE VANEY: So where are you
17 headquartered?

18 MR. ATIYA: Well, what we are -- Let me --
19 Maybe we should just continue with the questions and then --

20 MS. DE VANEY: No. You're dodging me.

21 MR. ATIYA: -- and then -- No, no, no, no.
22 I'm just obeying Nick here.

23 MR. PALSO: Yeah. We will -- I'll make
24 sure he answers that at the end.

25 MS. DE VANEY: All right. Okay.

26

1 MR. ATIYA: I've got your question here and
2 I will answer it.

3 MS. DE VANEY: Okay.

4 So there are a lot of kayakers and canoes,
5 small skiffs. Will they be able to -- what will the effect
6 of the lock have on people who have these small craft?

7 MR. GRALENSKI: I'm Fred Gralenski,
8 G-r-a-l-e-n-s-k-i. And I live here in Pembroke.

9 I think a problem is with the parallel
10 cycle itself. There are no other stations that have a
11 parallel cycle similar to yours. And yet you claim stuff
12 like no R&D required. And so it's sort of taken a little
13 liberties, I would think, with our place here.

14 I have not seen an energy balance of over a
15 tidal cycle on your system, what you're proposing. I would
16 certainly like to see that. And I hope FERC could see that
17 and make a judgment of that.

18 And also, like I said, on the same cycle,
19 there is a magazine Applied Energy 93, and it states on page
20 328:

21 The most viable and efficient barrage
22 operation mode for power generation considered to date has
23 been the mode of the ebb generation only.

24 So I'm not sure. The ebb generation seems
25 to be used in the Nova Scotia site. The Lorentz has a
26

1 complicated thing, something similar to yours but not close.
2 And I've got a list of their generation plus pumping. And
3 it's amazingly confusing. And -- well, I guess I'm a
4 Pollock so I can't figure all those things out.

5 (Laughter.)

6 MR. GRALENSKI: So if you can explain that
7 to me some time --

8 MR. ATIYA: Sure.

9 MR. GRALENSKI: -- and convince me, maybe
10 I'll be okay on that.

11 The other thing is other types of things
12 you did in your chart there you had of the tides, you say
13 there's going to be no net sedimentation. But in the chart
14 that you drew there there was an implication of
15 sedimentation. You know, I'm not sure you realize that.
16 But if you put it up there I'll show you where it is.

17 And what I mean is an abrupt change in the
18 amplitude of the water, especially at low water. If there's
19 an abrupt change that implies -- an abrupt change of level
20 of water, that implies an abrupt chunk of water going
21 through there. And that's sedimentation, man, to me.

22 MR. ATIYA: Yeah. I've got answers for
23 your questions, but we'll take them in order.

24 MR. GRALENSKI: Well, also I was interested
25 in the type of turbines. Are they Alden turbines, or --

26

1 Alden turbines are a new type, relatively new. And they
2 have supposedly the best fish survival rate through them.

3 And on your fish survival rate, is this
4 true also when turbines are used as pumps?

5 I have some other questions, too, sometime.

6 MR. PALSO: Just a second.

7 I'd just like to say, like, yes, please
8 keep giving us your comments. This is all going on the
9 record. And we'll make sure that everyone gets their
10 comments, you know, recorded for us so we can have them.
11 And at the end we'll get to have kind of Pennamaquan Power
12 answer as much as they can.

13 MR. BURDICK: My name is Kyle Burdick. I
14 live on Liam Point Road. I'm a land-owner and resident.
15 That's B-u-r-d-i-c-k.

16 My question is concerning a shell-fishing
17 issue. Maine Department of Marine Resources designates this
18 area -- or part of this area, rather, as Pollution Area
19 Number 56, Zone A, and that stretches from Hersey Point to
20 the Leighton Neck side. And it currently has a pollution
21 problem limiting shell-fishing; it's closed to
22 shell-fishing.

23 With any disruption of flow in and out of
24 the area I'd imagine that that pollution problem might get
25 worse rather than better. I was wondering whether you had
26

1 any issues with that.

2 MS. MENZEL: Gail Menzel, G-a-i-l
3 M-e-n-z-e-l.

4 I never heard you use the word dam. You
5 used the word barrage. My understanding is that Maine has
6 a policy of removing dams, not of constructing them.

7 (Applause.)

8 MS. MENZEL: Are you aware of that?

9 MR. ATIYA: I am.

10 MS. MENZEL: Okay.

11 MR. ATIYA: And I have a particular reason
12 for not using the word dam.

13 MS. MENZEL: Well, you used in your written
14 material.

15 MR. ATIYA: Did I?

16 MS. MENZEL: Yes.

17 MR. ATIYA: Okay.

18 MS. MENZEL: You say barrage dam.

19 MR. ATIYA: That was inadvertent. And I'll
20 explain why. I mean there's a specific reason why we don't
21 use that. And I'll address it.

22 MS. MENZEL: Okay. Thank you.

23 MS. KEENE: My name is Julie Keen,
24 K-e-e-n-e. I'm a resident of Tusket, not Pembroke. But
25 I've made a living on the Pembroke River for years as an
26

1 elver fisherman. I know a great deal about elvers.

2 And I noticed in some of the data, the
3 stuff in this book, it says that it's not available -- the
4 information's not available, which is one of the reasons
5 that they're not listed is they don't have the information.
6 But I can tell you about the elvers in that Pennamaquan
7 River.

8 When elvers come in they follow the
9 shoreline. When the tide starts to drop they look for cover
10 so they don't get eaten.

11 There was a study done in Canada. There
12 are eels that live in your estuaries year-round. 90 percent
13 of them are male. In the lakes 90 percent of them are
14 female. When the elvers come they depend on the current.
15 They fight the current to get up-river. That's what draws
16 them in. But the biggest thing that draws them in is the
17 smell of the fresh water.

18 If that estuary -- I don't know how long
19 that the water would be sitting there and how it would smell
20 to an eel. I have seen baby seals there all night long
21 while I've been fishing up in there. I don't know how a
22 baby seal would find its way back all through there.

23 And while everybody said -- you said behind
24 me and other people think about better clean energy -- and
25 we do need it -- we cannot lose our fisheries any more.

26

1 Everything's in trouble.

2 And, you know, I'm all for this. But I'm
3 not for destroying an estuary. You know, I'm all for
4 offshore wind things. But, you know, the things that I've
5 seen there in the middle of the night are incredible. You
6 know, alewives coming up through there where you could
7 almost walk on them. You know, there's salmon running
8 through that river. They're trying to spawn.

9 There's efforts across the state where
10 people are trying to reintroduce these species. You know,
11 how is this going to impact our elvers, the smell of the
12 water, them getting up through. How is it going to impact
13 the fall run of the silver eel when they go to the Sargasso
14 sea?

15 You know, we're being sued right now by
16 people out in California who are trying to shut down --
17 they're suing the federal government to list eels and elvers
18 as an endangered species. It's a federal protected
19 migratory species.

20 And I don't know what kind of an impact
21 this is going to have. But I have caught a lot of elvers.

22 And when we talk about economics, elvers
23 were worth \$50 million to the State of Maine this year. And
24 only 70 percent of the elver fishermen had reported when
25 those numbers came out. It's a lot.

26

1 And I can't -- I have a question. You said
2 -- I want to know about ice. I'm a clam-digger, I'm a
3 periwinkle-picker. I have not even been able to get in a
4 boat because there's so much more ice. I have seen those
5 rivers up there impacted, just giant, millions of tons of
6 ice in those rivers. And what is it going to do? Is it
7 going to pile up against that? That's the question. You
8 know, is it going to destroy it?

9 You talk about in so many years -- after 30
10 years that the dam -- or whatever you call it -- would be --
11 that the power would, you know -- that, you know, a few
12 cents, it would be three cents, then it would be nine cents
13 -- or vice versa. But I know from living here how much
14 money -- I mean I just watched them trying to re-fix the
15 Lubec-Campobello Bridge because of the salt water corrosion
16 and the impacts of these tides here that everything
17 deteriorates.

18 And so when you have to put back millions
19 of dollars to keep this project going and have to revitalize
20 it, then I can't see how -- can you tell me how, if you have
21 to put millions back into it, it's still going to bring the
22 amount of the cost, you know, how much electricity people's
23 going to save around here.

24 People make a living from the ocean here.
25 And there might be four or five or fifteen jobs over there.

26

1 But what happens to the other hundred people that are
2 clamming? I mean I just don't -- I really am worried about
3 the salinity levels up there, as a clam-digger. We've had a
4 lot of places closed: low salinity.

5 And he talked about pollution. And how
6 does the sediment -- sediment actually smothers clams. And
7 what is the impact on the scallop spat in that area. And
8 lobster migration.

9 MS. SHEEHAN: Hi, my name is Amy Sheehan,
10 S-h-e-e-h-a-n. And I own several properties on Leighton
11 Point.

12 I could probably figure this out if I read
13 it and added and calculated. But I had asked you at the
14 beginning of the meeting as well what the -- you had
15 mentioned what the -- how much of the wall is exposed at
16 above mean high. And I'm curious to know how much is
17 exposed at mean low.

18 And I also wanted you to touch upon how the
19 structure would be lit.

20 MR. MONROE: My name is James Monroe,
21 J-a-m-e-s M-o-n-r-o-e.

22 For, you know, whatever you want to call
23 it, due diligence, whatever, I represent an international
24 submarine engineering company. So we may or may not have a
25 commercial interest. In the interest of disclosure, I

26

1 wanted to say that.

2 My first comment is: I might suggest that
3 the presenter revisit the number of potential households
4 served. I don't know what number base they use. But Bangor
5 Hydro reported that the average kilowatt hour per month per
6 family in this region is 700 kilowatt hours a month.

7 And considering, if I heard correctly
8 earlier, it's a 25 megawatt project peak capacity, and tidal
9 projects generally -- in a very general number -- on average
10 produce about 40 percent on an average basis. And you'd
11 want to make sure those numbers are correct. I don't know
12 what your base number was. But that's what Bangor Hydro
13 says.

14 The other fundamental question I have is:
15 What do your turbines look like? I'd like to see those.

16 Another question I have: When you open the
17 lock -- I don't know; I'm not from here. I'm from Gray --
18 still in Maine, but I'm not from here -- very interested in
19 what's going on down here. We're going to do some business
20 down here.

21 But one of the questions I would have in a
22 practical sense is: I don't know how often this lock opens
23 and closes, but what effect that opening and closing has on
24 the performance of the system. And the lady already asked
25 the question about the low water issue.

26

1 And another business question: Do you have
2 a website? I mean to be able to find you. People are very
3 hard to find.

4 Thank you.

5 MR. HOLD: Trevor Hold again, a resident of
6 Cooper -- of Pembroke.

7 The noise level in the change of that.
8 Obviously the water is going to be running and things. I
9 know that can be a concern of area and local residents also.

10 MS. DAVIDSON: It's just going directly to
11 the court reporter.

12 MS. HODGESTON: I just have a real quick
13 question. Amy Hodgaston from Dennysville.

14 The R.H. Foster piece of property you're
15 interested in purchasing has an environmental impact
16 statement been conducted on that piece as of yet?

17 MR. ATIYA: No.

18 MS. HODGESTON: I'm really concerned about
19 that.

20 MR. ATIYA: Yeah. I'd say it's -- It may
21 be a brown site.

22 MR. HODGESTON: Pardon me?

23 MR. ATIYA: It may be a brown site.

24 UNIDENTIFIED PARTICIPANT: Brownfield.

25 MR. ATIYA: Brownfield. I'm sorry, not
26

1 brown site.

2 MS. LEIGHTON: Heidi Leighton, a resident
3 of Pembroke. Leighton is L-e-i-g-h-t-o-n.

4 I just wanted to have on the record the
5 areas where I think studies ought to be done. And a lot of
6 them have been addressed by other people.

7 But fishing: I've read your application
8 and I think that your information is a little bit -- not
9 detailed enough in terms of the impact on fishing,
10 commercial fishing in this area. I know for a fact, for
11 example, there are over 90 licenses issued just for scallop
12 dragging in the towns around Cobscook Bay. 90 fishermen
13 versus ten or fifteen jobs working on a dam; you know,
14 that's the kind of thing we'd like to see looked at.

15 As far as the access by fishermen or other
16 users through the lock, my question is about the security
17 zone that would be required around the dam or barrage, how
18 big it would be and what the exclusionary zone would be; and
19 whether that would be permanent, all the time, or something
20 that, you know, changes in size due to other
21 characteristics.

22 Also concerned, I would like to see studies
23 done on passage of anadromous fish species such as smelt,
24 eel, such like that, and larval species, scallops, bat,
25 urchin, larvae, and other commercial species that now have

26

1 free flow into and out of that area.

2 Thank you.

3 MR. LABERGE: Norman Laberge, Trescott.

4 L-a-b-e-r-g-e.

5 Since the pumping of the basin to fill an
6 empty is dependent on an external source of electricity, how
7 much electricity have you estimated will be required and
8 what provisions have you taken to account for loss of
9 commercial power since the whole scheme of operations
10 dependent on pumping water in and out? What measures have
11 been implemented to assure a supply of electricity that's
12 dependable and will always work to keep the natural tide
13 cycle.

14 A second question would be why 16 turbines?
15 In most cases you try to limit the number of turbines for
16 both economic and environmental reasons. But your project
17 includes 16 turbines, which encompass maybe close to half
18 the length of the dam.

19 And the final question: You mentioned
20 after the debt retirement of 30 years will be producing
21 power for probably less than two cents a kilowatt hour. How
22 will that saving be distributed to the local region?

23 MS. DAVIDSON: Anybody else?

24 MS. KEENE: Julie Keene.

25 I'm just wondering what will happen to that
26

1 estuary while you're blocking the tide from coming in --
2 which is the saltwater -- and the freshwater is pouring
3 down, if it's going to kill the clams. It's going to
4 completely dilute all the saltwater that's up there and
5 change -- I think you'll have a terrible pollution problem
6 up there.

7 And while I don't agree with blocking off
8 any estuary, why have you looked at this particular spot?
9 It's got a river that's coming out of lakes. Why haven't
10 you looked at another cove that doesn't have a lake and a
11 river up above it? I mean this is

12 MR. ATIYA: Okay. I think there -- Let me
13 try to answer some of these questions --

14 MS. DAVIDSON: Why don't we get to this one
15 last --

16 MR. ATIYA: Oh. I'm sorry.

17 MR. ROSS: Yes. I'm Ken Ross, K-e-n
18 R-o-s-s.

19 I'm a land-owner down on the end of Hersey
20 neck. My family has owned property down there for 112
21 years. I rent -- I have a small business of renting out a
22 cottage to people from elsewhere.

23 My people come there because they want --
24 they like the peace and quiet. They like the natural
25 beauty, relaxation, hiking, kayaking, miscellaneous quiet
26

1 pursuits that depend on a fairly decent unspoiled,
2 undeveloped and -- relatively undeveloped environment. And
3 on the side they spend a little money in town at the stores.

4 And some of them stay and build summer
5 homes, which provides jobs for local people. And some build
6 their permanent homes here and provide taxes and jobs for
7 the town.

8 And they're here for some of the same
9 reasons -- I'll be brief, don't worry -- that Maine is
10 attractive to the people from down-coast, where everything's
11 been so developed there's almost nothing natural left to see
12 and to be in.

13 But Cobscook Bay goes well beyond that.
14 Cobscook Bay is something really special. It's the last
15 relatively undeveloped large bay on the whole East Coast of
16 the United States. And I may be wrong about that, but tell
17 me which one is if this isn't.

18 It is also rated by the Nature Conservancy
19 as one of the last great wild places in the lower 48 states.
20 That's quite a thing for a bay.

21 Beyond that, the bay is one of the most
22 biologically productive. We've heard a little bit about the
23 fishing here and how important that is.

24 Well, a couple of things on that that
25 relate to this issue. Cobscook Bay has not always been
26

1 treated very well.

2 My father used to spend his summers here in
3 the 1920s before they built the causeway across to Eastport.
4 He said that after they built that causeway it shut off a
5 lot of the circular flow of water from in through the Lubec
6 channel and around Eastport and back around. After that he
7 said the fishing -- which included cods and haddock, which
8 you could catch in a boat out there -- just dropped right
9 off drastically.

10 They messed with the flow of the bay. And
11 it's been that way ever since. And he said the bird life
12 also dropped way off. This was way back in the '30s and
13 '40s.

14 Well, now we have a proposal to shut off
15 another part of the bay. It may be different than what was
16 done by the causeway, but it's another potential arm of the
17 bay that may be taken out of the natural cycles of
18 circulation and life that have made this bay so special and
19 so productive for fishermen and so on.

20 Now I realize that -- So I think that it's
21 not simply a question for you; it's a question for all of
22 us. It's looking forward to the future.

23 It seems to me that if this project goes
24 through -- and I will give the proposal -- the people who
25 are proposing this credit for trying their best to mitigate
26

1 environmental impacts and so on -- that this will be just
2 the first step in a process of building more and more of
3 these. And this special bay, this only one of its kind in
4 the United States, is going to be turned into an industrial
5 zone. And little by little there will be fewer and fewer
6 fish and there will be less and less natural quality and
7 scenery and the kind of things that some people come here
8 for.

9 True, it will definitely provide taxes for
10 the town, and it will provide a few jobs -- twelve, ten,
11 fifteen jobs. But they won't necessarily all be held by
12 Pembroke people; maybe someone from Callus or Princeton or
13 whatever.

14 And there will be other spin-off bits.
15 Maybe for a while, as it was promised or suggested, it will
16 be a tourist spot -- I mean it will be a tourist attraction
17 for people who want to come see this dam. But will that be
18 still true after they build a bunch of other ones? Why
19 should they come here just to see another dam?

20 So we're really faced with a long term
21 major question here that I think goes a little bit beyond
22 just whether it's going to hurt this fishery or that
23 fishery, or whether -- what the seals are going to do and so
24 on.

25 Is it really worth it to treat this natural
26

1 treasure of the United States -- not just Washington
2 County's and Maine's -- to treat it that way and start that
3 process of industrializing the thing and turning it into
4 another copy of what happens down below just for the limited
5 benefits that will come from it?

6 I think that's a serious question. I think
7 I know my answer to it tentatively. And I really don't
8 think it sounds like a good bargain, though I'll try to
9 remain open-minded about it.

10 Thanks for your time.

11 DR. SEELEY: My name is Robin Seeley,
12 R-o-b-i-n S-e-e-l-e-y. I'm a marine biologist and I've been
13 a tax-payer in Pembroke for 28 years.

14 I have some general comments and then some
15 comments related to the scoping document.

16 My general comment first is that it's clear
17 both from the text of the project application document from
18 July 2012 and from the facts provided by the project
19 developers today at the boat launch that this is an
20 experimental project. When asked to provide the name of a
21 similar facility so that members of the public could
22 investigate a similar facility that is finished and
23 generating power, the developer stated that there was no
24 similar facility.

25 Quote: In addition to power production the
26

1 Pennamaquan Tidal Power Plant is intended to be a research
2 facility. Quote, unquote.

3 This is a working bay. Cobscook Bay and
4 its resources and productivity on which the human population
5 depends are far too precious to be subject to a grand
6 experiment, which is what this project clearly is.

7 A procedural question: Why does the
8 scoping document and the project plan repeat that an
9 environmental assessment -- EA -- will be done? What is the
10 trigger for an environmental impact statement rather than an
11 environmental assessment? Is the environmental assessment
12 being used to determine whether an environmental impact
13 statement is appropriate for this project, or has someone
14 made the decision that an environmental impact statement is
15 not going to be required?

16 Secondly, reasonable alternatives. I
17 believe we heard this afternoon about a facility -- a type
18 of facility that would not completely block off the
19 Pennamaquan but would only reach halfway across it. This
20 alternative should be investigated.

21 And finally on design: The boat lift of
22 the 2010 plan is now a boat lock. But it's labeled 'small
23 boat lock.' How will fishing boats that are not small boats
24 access the river? What about truly small boats? Will they
25 be safe around the dam? And what will the draggers do?

26

1 With respect to scope, the geographic scope
2 in the project description is much too small from the
3 scoping document. For example, the dam could impact current
4 flow regimes in Cobscook Bay as a whole, including the
5 reversing falls area. How would the dam affect currents,
6 location, velocity and depth throughout Cobscook Bay?

7 And my second example is: There is
8 transport of nutrients from up-river to the Cobscook Bay
9 area as a while via seaweed rafts. How will the dam affect
10 this transport of nutrients from the river to the greater
11 bay?

12 Temporal scope. We heard that the life of
13 the power plant is about 120 years. So the temporal scope,
14 which is in the scoping document of 50 years, needs to
15 extend to the life of the power plant, not half its life.

16 As another example, the Quoddy area
17 experiences a greater sea level rise than other areas of the
18 eastern coast. And I wonder how the project developers have
19 accounted for the amount of sea level rise that's going to
20 take place in 120 years.

21 Under geologic and soil resources, what
22 needs to be added are the new erosion and sedimentation
23 patterns created as a result of the dam. Other tidal
24 barrage dams that are not the same but somewhat similar have
25 erosion impacts and sedimentation impacts. We've heard
26

1 about sedimentation in the scoping document, but not
2 erosion.

3 Under aquatic resources, water quality:
4 What is the impact of construction and operation on state
5 water quality designation, which is SB, of the Pennamaquan
6 River Bay? Will the dam negatively affect the SP
7 designation.

8 Under water quality, what local resources
9 are available in the event of a spill of hazardous material
10 from construction or operation?

11 Nutrients. What is the impact of the dam
12 on rafting seaweed that would normally flow from the river
13 out to the sea and provide habitat and nutrients to the rest
14 of the bay?

15 Under temperature: What is the current
16 temperature profile of the project area throughout the four
17 seasons, and what impact will the da have on the temperature
18 profile?

19 Under aquatic species: What is the impact
20 of the dam on presence, absence, and population size of
21 invasive marine species? For example, if the temperature
22 rises even slightly in the basin, green crab populations
23 will increase substantially, with an impact on shellfish.

24 And as another example, will the invasive
25 tunakit, which covers the bottom in some parts of the bay,
26

1 expand and spread over the bottom of the river?

2 Eelgrass. Where are the eelgrass beds?

3 What will be the impact of the dam construction and
4 operation on eelgrass, particularly with concerns about
5 sedimentation? What species will be negatively affected by
6 these changes in eelgrass?

7 As far as algal flats, what is the seasonal
8 pattern of green slime on the flats and will the dam impact
9 these patterns of abundance of green slime?

10 Under threatened and endangered species:
11 the federal threatened and endangered species have been
12 listed, but the state threatened and endangered species need
13 to be added.

14 And also protected resources -- for
15 example, marine mammals that are not necessarily on the
16 threatened and endangered list but are on the protected list
17 -- harbor seals, gray seals and porpoise. There needs to be
18 study of seal use of the ledges in the study area inside the
19 dam and just outside. Are the seals using these ledges as
20 pupping sites? I think they are.

21 You also need to add the species that are
22 state-threatened. There's a list -- a state list listed on
23 the web. It includes 61 species of marine, fresh water and
24 terrestrial that are on the state threatened list.

25 There's also a list of Maine species of
26

1 special concern on the inland fisheries and wildlife
2 webpage. Those need to be also considered in the scope.

3 There should also be a look at impact on
4 property values in the project area, When ocean-front
5 properties become pond-front properties.

6 Impact of lights. Pembroke is a low-light
7 area. What is the impact of adding lights for construction
8 and operation on the night sky? And what is the impact on
9 the sound-scape above and below water.

10 Above water the project area is very quiet
11 now. The sounds are mostly fishing boats and natural
12 sounds: seals vocalizing, loon calls, duck calls, eagle
13 calls, et cetera. What will the impact of this dam be on
14 this precious soundscape?

15 And below-water: What is the impact of
16 under-water construction noise and operation noise on marine
17 mammal behavior and communication, especially reproductive
18 behavior and parent-pup communication in the seals.

19 I would add to the proposed studies:
20 Aquatic resources, mollusk resources -- not just crustaceans
21 but Mollusk -- including clam, wrinkle species, welk,
22 scallops and mussels. Not just micro-invertebrates should
23 be studied, but he macro-invertebrates. The
24 maco-invertebrate larvae, what's going to happen to them
25 when they go through the turbines.

26

1 Lobster nursery areas should be
2 investigated; eel abundance and movement, alewife abundance
3 of movement, and river otter abundance and behavior.

4 And finally, the request for information.
5 There are DEP maps that apparently have not been consulted
6 called Environmental vulnerabilities, which clearly show
7 areas of seal activity throughout the Pennamaquan, as well
8 as many other vulnerabilities.

9 And finally, as a general comment, I find
10 it really astounding that some of us whose properties are
11 directly in the project area, have never been notified
12 directly by the project developer. And for some of us the
13 first we ever heard of this was by looking in the paper and
14 seeing our properties included in the project area.

15 Thank you.

16 MR. PALSO: Okay. Thank you for your
17 comments.

18 Many of these questions are very complex.
19 So they're going to take a lot more study to answer. I
20 don't know if Pennamaquan will have the answer for them
21 tonight. But this all goes into our crafting of the study
22 plan for the projects. We gave a lot of information.

23 I can quickly answer the question about the
24 EA to the EIS. It says on page one of our scoping document
25 that although our current intent is to prepare a draft and
26

1 final environmental assessment -- an EA -- there is a
2 possibility that an EIS -- an environmental impact statement
3 -- will be required. And we determine that by looking at
4 how much information we get in and how complex this project
5 is going to be.

6 Now I'll turn it over to Pennamaquan Tidal.
7 And they'll try to answer as many of your questions as they
8 can.

9 MR. ATIYA: Okay.

10 There is one sort of comment that I'd like
11 to begin with. And that is, you are -- I'm sorry. You
12 are ?

13 DR. SEELEY: Dr. Seeley.

14 MR. ATIYA: Dr. Seeley.

15 We actually had a meeting here in Pembroke
16 before and the intention was to have a subsequent meeting
17 before the FERC meeting. It just turned out that the
18 schedules didn't permit it. And for that, I, you know, I
19 just want to apologize. Because power development is local,
20 and community relations are absolutely an essential part of
21 this. And, you know, that is something that we will
22 certainly, you know, have to -- have intended to address and
23 will address -- will address fully.

24 So I just -- I want to just simply
25 recognize the fact that that has not been -- that this has
26

1 not been adequate in terms of our communication with the
2 community and that we intend to communicate more fully.
3 Even though, you know, we have been here -- we did provide a
4 document for general distribution -- you know, this has not
5 worked.

6 But we will -- this is the beginning of a
7 dialogue. It's not -- This isn't it.

8 So having said that, let me begin by this
9 issue of is this a dam. Okay? And the reason we do not use
10 the term dam is because really this does not operate like
11 a dam. And that is absolutely a critical distinction.

12 A dam typically is an enclosure that
13 maintains a high level of water on one end. It has -- it
14 floods a basin. And none of these are characteristics of
15 this particular cycle. In other words, you know, what we
16 have is we have the natural ebb and flow through the barrage
17 here. You know, we do not impound water in the way that a
18 dam does. And that's why, you know, we do not term this as
19 a dam.

20 And the key solutions to the environmental
21 problems here -- and I'll try to answer these in sort of a
22 general way; and then there are of course specific kinds of
23 topics that have to be taken.

24 The key thing about this is that the
25 parallel cycle means that the water that flows into the
26

1 river -- into Pennamaquan River and out of the Pennamaquan
2 River is the same in quantity as normally flows. So in
3 other words, the key environmental protection here is the
4 maintenance of the natural hydrological cycle within the
5 basin. That is absolutely essential.

6 Not only that, but we also maintain the
7 rate, the same rate of flow. I think what Mr. Gralenski was
8 referring to -- and let me see if I can't get us back to
9 that. You were talking about sedimentation presumably
10 during these -- during those periods when we have -- okay.

11 One of the reasons we in fact chose to put
12 in 16 turbines rather than two turbines is we can start
13 these turbines sequentially. When we do that what happens
14 is is that we found off the bottom here. And that means
15 that we eliminate this residency time, if it's needed. So
16 this is a first -- this is one way to generate power. But
17 we can start with these in order to more closely follow the
18 natural tidal cycle.

19 The other aspect of this is that the flow
20 into it, which is given by the slope of the line here, is --
21 the rate of flow is the natural flow. And so therefore, you
22 know, what is it that would change under those
23 circumstances? The tidal range is going to be the same as
24 it is. The rate of flow into the basin is going to be the
25 same. The out-flow through the basin is going to be the

26

1 same.

2 So it's unlikely, for example, that -- we
3 should have no changes in the temperature distribution, we
4 have no changes in the salinity. You know, we have no
5 changes to speak of in the residency time. And so
6 therefore, you know, we don't -- you know, the cycle really
7 addresses those issues. And that is an answer in a sort of
8 a general way. And then, you know, we need to get into more
9 specific kinds of issues.

10 And, you know, perhaps this can, you know,
11 we can open up a dialogue here, if you don't mind, because I
12 think it's important for us to talk. This is a long list.
13 And for me to remember -- to address all these questions,
14 you know, this is a complicated web of questions here.

15 So, Dr. Seeley, what's your response to
16 this?

17 DR. SEELEY: Most of my comments were
18 directed at the scoping document and the things that were
19 left out.

20 MR. ATIYA: Yes.

21 DR. SEELEY: And the things that needed to
22 be added.

23 MR. ATIYA: Okay.

24 DR. SEELEY: I don't really have any
25 questions of the project.

26

1 MR. ATIYA: Okay.

2 So I think these are important issues.

3 MR. GOODWIN: What does someone have to do

4 --

5 MS. DAVIDSON: Hold on one second. Here
6 you go. Speak into this and state your name.

7 MR. GOODWIN: I can speak into this. I'm
8 going to speak into the other one in a little bit when you
9 call on me.

10 But what you're trying to do is intimidate
11 some of the people in here to take over and say yes or no,
12 that therefore this project?

13 We have no information, sir. And you
14 gentlemen from Washington, you're not doing your job. You
15 had to direct this man to have informational meetings. He
16 got his first application in in November the 22nd of 2010.
17 And here we are tonight. He showed up here today to go down
18 at the dock.

19 How many people in this room have ever seen
20 that man?

21 You saw him? How long ago?

22 We haven't seen him. He's the licensee.
23 You gave him directions in 2010 --

24 MR. PALSO: He's not a licensee. He's
25 applying for a license.

26

1 MR. GOODWIN: Well, in every one of the
2 documents they called him the licensee. So it's good enough
3 for me.

4 You gave him directions to seek out counsel
5 from folks in Pembroke and the surrounding area in regards
6 to this project in a total blank until tonight. And to ask
7 people here to make some kind of a determination on looking
8 at a model or going down on the boat ramp today where all we
9 could see is the expanse of water and two shores. We need
10 information -- a lot of it.

11 Now you saw all these questions generated
12 tonight. That's nothing compared to what will be generated
13 in the next year. And when I get up to the microphone we
14 will get some additional time.

15 Thank you, Mr. Chair.

16 MS. DAVIDSON: Well, tell us who you are.

17 MR. GOODWIN: I'm Albian Goodwin and I live
18 in Pembroke, Maine. I live on the water in Hersey Cove.
19 I've only been here 50 years, and the people want to know
20 when I'm going back home.

21 (Laughter.)

22 MR. GOODWIN: See, I came in from
23 Robbinston over the ridge. My kids are all accepted because
24 they came to this school -- not this school: the old one.
25 But I'm not going back to Robbinston. I've been here too
26

1 long.

2 Right. We've got a lot of work to do, and
3 we need time. We've got to do away with your November 14th
4 date. That's a no-no. That's three weeks from now. What
5 do you expect to get from these folks here if there's no
6 meetings, no committee.

7 You folks in Washington, in all of the
8 Quoddy LNGs and all of the LNGs on the river, you instructed
9 those people to form local advisory committees. I chose
10 Quoddy Bay. And for two and a half years I went to monthly
11 meetings where we discussed -- never voted on a project,
12 just discussed it. That finally died.

13 Four of them died; there's only one left.
14 Guaranteed by spring that will be gone because you can't
15 bring that ship up there. But you guys are doing it. And
16 now you come in here tonight.

17 I'd like to have the minutes of the meeting
18 you had with the Tribe yesterday. They are not very pleased
19 either because they were supposed to be part of the
20 information process. They're in the law. So they got
21 angry.

22 Yesterday afternoon I looked at the Bangor
23 paper and there it is: The Tribe demanded a meeting with
24 you guys because they knew you were coming. And I imagine
25 you got an earful. But that ain't half of it.

26

1 Eventually you're going to hear from us
2 because if he doesn't do his job -- the licensee -- the town
3 should do it for him and form a committee of two dozen
4 people to discuss each and every article here, talk about it
5 at a meeting with you guys. We're not supposed to be
6 dealing with him; we're supposed to have already had three
7 dozen meetings and bring forward to you the things that we
8 want done that he said he's not going to do. That's your
9 job.

10 Our job is to have some informational
11 meetings and bring forward some questions. And I'll be glad
12 when you go by your list over there because I've been
13 waiting a long time to make the presentation.

14 MR. KARTALIA: You can come up now and
15 continue at this mike.

16 MR. GOODWIN: I'm not coming until you go
17 by your list.

18 MR. PALSO: If I may address this, the
19 list, there is no set list of when people would speak.
20 That's why we had the question and answer session just now.

21 I'm not the chairman of the Commission or
22 of this meeting. I'm just the coordinator for the project.

23 MR. GOODWIN: Right.

24 MR. PALSO: Regarding this process, it's
25 all set by our regulations, which were set forth by
26

1 Congress. We cannot change that process. We -- you know, I
2 did not decide that it should be November 13th as the due
3 date. That is what is required by law in our regulations.

4 And this is the beginning of our process.
5 You know, we did not find out about this project until July
6 when we set forth these meetings. It took a couple months
7 to plan them.

8 Regarding the Tribe, Tribal meeting, we
9 sent them a letter and asked if they were interested in the
10 project, in having a meeting with us. And then they, you
11 know, said that, yes, they would like to have a meeting. It
12 wasn't that they heard we were coming up and asked to have
13 it.

14 We requested a meeting if they wanted one,
15 and we just happened to have it because it was convenient --
16 we had it yesterday because it was convenient because we
17 were up here.

18 And we will be putting the minutes of that
19 meeting up on our FERC eLibrary and it will go with all the
20 other files for this project. And that will be done as soon
21 as we get home and transcribe all those minutes.

22 MR. GOODWIN: I have written material for
23 you.

24 MR. PALSO: Yeah, if you have written
25 material you can submit it -- you can send it in the mail.

26

1 I had all the instructions there. It's all in the scoping
2 document. And I believe it is in the newspaper article,
3 too. There's the address that you can send it to. That
4 will get to us in Washington.

5 MR. GOODWIN: You --

6 MR. PALSO: And it will go up there with
7 all the other information for the project.

8 MR. GOODWIN: You came here to hear from
9 the public.

10 MR. PALSO: Yes.

11 MR. GOODWIN: I'm the public. I want to be
12 heard.

13 MR. PALSO: Well, you are being heard right
14 now. What more can I do for you?

15 MR. GOODWIN: Move aside.

16 MR. PALSO: Well, please come up.

17 MR. GOODWIN: Are you the acting clerk of
18 this outfit? I'm supposed to give you this paperwork.

19 MR. PALSO: No, you're supposed to be -- We
20 cannot accept paperwork. You have to send it in through the
21 address and e-mail.

22 MR. GOODWIN: Okay.

23 MR. PALSO: It's all there in the scoping
24 document, and I believe it was in the newspaper article.

25 MR. GOODWIN: Okay.

26

1 Hello. Looks good.

2 I wrote this October 21st for the Federal
3 Energy Regulatory Commission. I have enough -- according to
4 FERC, they wanted seven copies of everything you testify to.
5 So I've got ten. But if he doesn't want them, I'll mail
6 them. I've got the address.

7 I'm here as an intervenor. I have
8 intervenor status. I'm reading this to the Federal Energy
9 Regulatory Commission.

10 Members of the Commission: Concerning
11 project number 13884-001, Pennamaquan Tidal Power LLC. In
12 November 2010 the application was filed. The
13 pre-application document for the project called for the
14 applicant/licensee to meet/consult with federal, state,
15 local, Tribes, non-government agencies and others for the
16 development and filing of a preliminary list of issues
17 identified, and studies related to these issues, to develop
18 a license application. That's page five of seven, FERC,
19 March 1st, 2011.

20 Sirs/Madam -- because this is written to
21 the five Commissioners, one of which is a woman. By the
22 way, I have all their names, telephone numbers. Maybe I'd
23 better call them in the morning.

24 We, the Town of Pembroke have not had an
25 informational meeting with the licensee or anyone else.

26

1 Anyone else. You scheduled this meeting October 25th, 2012,
2 a site visit 1:00 p.m. and the public meeting 6:00 p.m. for
3 the public to come forward.

4 Meeting objectives -- their objectives --
5 on your call for the meeting. The licensee could have,
6 should have, under your direction, set up an advisory
7 committee in Pembroke. Had they been meeting, most
8 certainly many questions would come up.

9 Can you imagine how many? We probably
10 heard 50 questions here tonight, and half the audience is
11 gone already. They've probably gone home because Detroit is
12 probably losing.

13 (Laughter.)

14 MR. GOODWIN: We won't know that for a
15 while.

16 The licensee was to report to FERC each six
17 months period on their doings. This is starting in 2010
18 when they were to meet with the local people.

19 Sirs and Madam, this testimony is to be
20 considered formal notice.

21 Remember what I said at the beginning? I'm
22 an intervenor. I have intervenor status. An intervenor can
23 formally change some of the rules.

24 This testimony is to be considered formal
25 notice under your rules to object to these proceedings and
26

1 ask that you change your closing date for incoming data --
2 that's the November date, after which you can't even speak
3 to these people. You can't send them any more information
4 because they're going to close it unless the Commission --
5 his bosses -- change it. And they will.

6 Under your rules to object to these
7 proceedings and ask that you change your closing date for
8 incoming data and put this project on hold to allow for
9 local informational meetings and a committee to work with
10 the licensee.

11 And this is signed Albian Goodwin.

12 Look, folks, we're not against the project.
13 We're not against your project. We're not for it; we're not
14 agin' it. We want information.

15 You have been missing in action. You hear
16 me? You have to change your ways.

17 The Quoddy development, when they wanted
18 LNG, those people moved into Perry. They bought buildings,
19 set up office space. You're talking about a \$70 million
20 project; you've got to put some time here.

21 You should put an ad in the paper; ask for
22 two dozen people in Pembroke to come forward to serve on an
23 advisory team with you. Can you imagine the work you can
24 get done then, answering the questions, bringing forth some
25 more questions, go on a visit. It's all got to be done.

26

1 If you do it right, you'll get it done. We
2 need electric power and we're told that we're not going to
3 get it. That juice in one and a half seconds after it
4 leaves your building, it's going to be in Harrisburg,
5 Pennsylvania. We ain't getting nothing. You don't want to
6 tell the people that, but I'm telling them.

7 (Laughter.)

8 MR. GOODWIN: Unless we can cut a deal with
9 somebody. And that somebody is the governor of the State of
10 Maine and the PUC, because you're going to have to deal with
11 them.

12 You're not selling nothing until you go to
13 the PUC. And the governor names those people. And I don't
14 know too many of them; I do know the chair. Maybe we can
15 fight it because our electric charges are too high.

16 Look, I'm going to close it down here. And
17 I will mail in all this stuff.

18 MR. PALSO: Thank you.

19 MR. GOODWIN: And ask the Commissioners to
20 --

21 MR. ATIYA: Well, I appreciate your
22 comments. And I think they're important comments --

23 MS. DAVIDSON: I think we have one more
24 comment real quick.

25 MR. ATIYA: Yes. Go ahead.

26

1 MR. HOLD: Part of the reason I asked you
2 the question earlier about being part of the Half Moon
3 project, looking -- doing some research when I heard about
4 this, I saw your name attached to that and the date of
5 November 2010.

6 Is this application process that we're
7 standing here part of that same 2010 document, or is this
8 something separate entirely and the process started further
9 down the road?

10 MR. GOODWIN: Are you talking to me?

11 MR. ATIYA: No. He's actually asking me.

12 We were initially involved. We had
13 proposed a project at Half Moon Cove. That project went to
14 Tide Walker. And then we subsequently applied for the
15 project in Pennamaquan. So there's a little bit of a
16 complicated history here. And, you know, these two projects
17 need to be kept distinct from each other.

18 But, you know, I want to respond to Mr.
19 Goodwin here because, you know, these projects are complex
20 projects. And they require many pieces. One of the things,
21 for example -- Let me just give you an example.

22 In doing this one of the things that we
23 needed to do was we needed to develop this parallel cycle
24 and to do it in a way that was credible and believable. And
25 so what we did is we actually went and modeled the level of
26

1 the water with Alstom Power in 130 second intervals.

2 All of this takes time. And in order, you
3 know, for us to present you with information, that
4 information actually has to be available. And part of it is
5 developing it.

6 So what we have done so far is we have been
7 in the process of developing the necessary information base
8 to present to you. That's where we're at now.

9 So this isn't the beginning of a process
10 that ends on November 14th. This is the beginning of a
11 dialogue. And what we need to do is we need to decide how
12 best to structure and develop this dialogue.

13 I'd like you to -- My email address and my
14 direct contact information is with Mr. Jameson. And, you
15 know, I would like to, you know, maybe perhaps start a
16 dialogue, you know, on an individual basis with you dealing
17 with the kind of questions that you've got. And, you know,
18 these are obviously many.

19 So let me begin by asking you: How do we
20 best -- because I hope you will keep an open mind about this
21 project. There's a lot here at stake. And what's at stake
22 is beyond me and beyond all of us here. I mean the issues
23 of things like global warming and ocean acidification are
24 things that we've got to deal with.

25 This is a method of developing power that
26

1 is actually a low cost method of generating renewable
2 energy. It's lower during its first 30 years than any other
3 available source, and over the long term it's lower than
4 anything else.

5 So what we need to do is, you know -- and I
6 would be glad to provide you with the evidence for those
7 sorts of claims.

8 Someone was asking I believe about the cost
9 of power. When we said, you know, the cost of power in 30
10 years would be, in terms of the production costs, would be
11 roughly two cents a kilowatt hour, this is based not on a
12 guess. This is based on the actual cost of power from the
13 Lorentz plant. That's what they are producing it for. So
14 you can go to the French Electricity Utility and you can see
15 it.

16 And so there's a lot of that sort of
17 information that needs to be conveyed. And somehow we need
18 to convey that information.

19 So let me ask you, you know, just how would
20 it be -- how is the best way that we can initiate this
21 dialogue between us and you? In other words, you know,
22 we're facing, as I said, an issue of this global warming,
23 ocean acidification, which is going to have an enormous
24 impact on fisheries, far greater than anything else. And we
25 need to address it. This is one way to address it.

26

1 So what we need to do, though, in order to
2 do this we need to have a dialogue. We need to put together
3 a dialogue. So what can we do? How can we put it together?

4 MR. KARTALIA: I would like to make sure
5 that with the time remaining that we stick to the objectives
6 we have tonight, which are to identify issues and to be
7 clear about developing a list of studies that need to be
8 conducted that we can work --

9 MR. ATIYA: Okay.

10 MR. KARTALIA: -- through over the next
11 several months leading up to the determination.

12 We're already starting to get -- you know,
13 I realize people are going to leave here with a lot of
14 questions unanswered, including us. And that's the reason
15 why we'll be developing a list of studies that are going to
16 be conducted over the next couple of years to get all this
17 information in.

18 The mechanism for dialogue is a very -- I
19 guess there are a lot of different ways that could happen.
20 These dates in our document are quite firm about how --

21 MR. ATIYA: Right. Absolutely.

22 MR. KARTALIA: -- we move forward.

23 On the other hand, there's nothing
24 preventing you from having additional meetings beyond those
25 that are scheduled here. There is nothing to prevent other
26

1 people from forming groups that want to participate in the
2 study plan meetings, working on the study methods and study
3 scopes, as we will be doing with Pennamaquan Tidal and the
4 State Department of Marine Fisheries and Department of
5 Inland Fish and Wildlife, and National Marine Fisheries
6 Service. We're going to meet with a lot of those people
7 tomorrow.

8 There's a clear process for developing a
9 list of studies around the list of issues that have been
10 made to get all this information in. And what happens
11 outside of that process in terms of additional consultation
12 between the community and Pennamaquan Tidal is very much an
13 open-ended process. How that goes forward, you know, it
14 could be tailored to whatever fits people's needs.

15 But I don't want to spend too much time
16 talking about that external process and not address the
17 clear process deadlines that we have --

18 MR. ATIYA: Right.

19 MR. KARTALIA: -- within the FERC licensing
20 process.

21 MR. ATIYA: Right.

22 MR. KARTALIA: So what we want to get into
23 the record between now and November 13th is all the issues
24 people are concerned about so we can identify the scopes and
25 studies that need to be conducted to answer all the

26

1 questions.

2 MS. BUROW: Romantha Burow.

3 I would like to suggest -- you're going to
4 get this transcript from this meeting -- right? -- of all
5 the people's questions that were provided to you?

6 MR. ATIYA: Yes.

7 MS. BUROW: You're going to get your list
8 because you'll have specific issues. There are some things
9 that are not issues that you want to deal with right now.

10 MR. ATIYA: Right.

11 MS. BUROW: What you can do is answer the,
12 you know, in practical terms the baseline questions that
13 need to be answered about what about kayaks, all the things
14 that need to be answered, and leave them to deal with the
15 list for their studies, which is what they legally have to
16 do.

17 So if everybody's questions get answered
18 and they know -- or they'll at least know referred to for a
19 study or referred for a study, that's the way you can
20 annotate it and provide something printed to the people in
21 the town or the people who are outside the town -- I know,
22 Julie -- so that they can have some other response.

23 MS. DAVIDSON: I just want to make
24 something clear real quick. Just this November date is not
25 the end-all, be-all, this is your only point to speak up.

26

1 Okay?

2 As, you know, we've laid out, this is the
3 very beginning of the process. You are able to have
4 dialogue externally, you know, however committees or
5 what-not would want to be set up. And the November date is
6 the first of many dates that comments can be made.

7 MS. KEENE: Julie Keene, K-e-e-n-e.

8 I don't know your name, sir, in the blue
9 shirt.

10 MR. KARTALIA: I'm sorry. I was Steve
11 Kartalia.

12 MS. KEENE: Okay. Mr. Kartalia.

13 MR. KARTALIA: Steve is fine.

14 MS. KEENE: Steve.

15 Steve, I heard you talking about having a
16 meeting tomorrow with NOAA and the Department of Marine
17 Resources and Inland fish.

18 MR. KARTALIA: That's right.

19 MS. KEENE: Okay.

20 I want to add something to that because
21 over the many, many years now I've advocated for this bay in
22 Augusta, and I have been in front of a lot of people down
23 there who don't even know where Cobscook Bay is. They've
24 never seen it; they don't know what lies in this bay.

25 We have some wonderful people in Augusta.

26

1 I'm not dishing Augusta. But it's very hard for people down
2 there to know what's going on in this river. And when you
3 guys start to develop these studies the best thing you can
4 do is if you are going to talk to the DMR about an elver
5 study, come and get some of us elver fishermen. Let us show
6 you where they run. Let us show you how they run.

7 You know, we have to report to the DMR what
8 we catch on that river. There are landing reports there.
9 You know, there are wrinkle pickers; go and talk to the
10 wrinkle pickers, hairy wrinkles.

11 UNIDENTIFIED PARTICIPANT: Talk to the
12 residents about what we see as far as marine life.

13 MS. KEENE: There are people that earn a
14 living on that place, big-time. Talk to the urchin
15 fishermen, who urchin drag, urchin dive in that area. You
16 cannot get somebody from Augusta to tell you. They only
17 have numbers, and they can tell you how many licenses around
18 the bay. And they might be able to tell you how many pounds
19 of urchins were caught. But they can't tell you that behind
20 this ledge is some of the best grounds and on what stages of
21 the tide. You need the local knowledge.

22 So when you come to do this water things,
23 please contact the Cobscook Bay resource center and ask them
24 to involve some of your local fishermen. And they will know
25 who to contact.

26

1 Is Heidi gone?

2 UNIDENTIFIED PARTICIPANT: She left.

3 UNIDENTIFIED PARTICIPANT: She left.

4 MS. KEENE: As far as what's going on in
5 the estuary, this woman has studied the bay for -- how many
6 years? 28 years. So you need to involve the people that
7 know. Local knowledge is much greater than somebody sitting
8 in an office somewhere that's looking at a paper.

9 MR. KARTALIA: I agree with what you said.
10 And I'm hopeful that when we -- When Pennamaquan Tidal
11 issues their proposed study plan they will also set up a
12 meeting to discuss what they've proposed, the adequacy of
13 it, the scopes of the studies, whether the sampling sites
14 they've proposed are the correct sampling sites, like you
15 were talking about. And I hope that at that meeting there
16 are people with that specific knowledge.

17 It will be a publicly noticed meeting. And
18 it would be excellent to have that type of local expertise
19 at the meeting.

20 MS. DAVIDSON: And these types of
21 methodologies for information gathering can be included in
22 study requests, including, you know, the study requests that
23 we will also identify.

24 MS. SEELEY: Robin Seeley.

25 Will there be an updated scoping document,
26

1 then, a scoping document two?

2 MR. PALSO: Yes, I'm pretty sure there will
3 be.

4 MR. KARTALIA: I think, considering some of
5 the issues that you raised that we did not preliminarily
6 identify in this document, that we will be issuing a revised
7 scoping document.

8 MS. DE VANEY: Before we leave tonight --
9 My name is Kim DeVaney, D-e-V-a-n-e-y, Pembroke resident.
10 Before we leave tonight, would you please
11 tell us where your headquarters is located?

12 MR. ATIYA: What we are is we are actually
13 -- there are several companies that are involved in this,
14 including Alstom. Halcyon, which is a parent company of one
15 of the companies involved in this project, is in Salt Lake
16 City.

17 Our main contact here in Maine, and the
18 office here in Maine, is through Preti Flaherty in -- the
19 law firm in Augusta.

20 And then we have other associates that in
21 fact deal with various aspects of the project, like, for
22 example, the drilling. We have associates in Britain that
23 are specialists in large diameter drilling. We are
24 currently in the process of deciding who will be the
25 construction company for this.

26

1 And so these are complicated projects and
2 they're not, you know, single entity projects. They involve
3 lots of groups.

4 MS. DE VANEY: Who conceived --

5 MR. ATIYA: I am the focal person.

6 MS. DE VANEY: Okay. So where are you
7 from?

8 MR. ATIYA: And so I'm in Salt Lake City in
9 Utah.

10 MS. DE VANEY: Okay. That's a long way
11 away.

12 MR. ATIYA: Which is an odd place for tidal
13 power. But it does involve numerous companies from numerous
14 places. And so it's not -- it's not just simply a single
15 entity development.

16 MR. DE VANEY: I'm her husband, William
17 DeVaney. You've already got the spelling; I won't bore you
18 with that.

19 I'm a retired law enforcement officer so I
20 have a tendency to just kind of come right straight across
21 the cuff. I don't like what's being said.

22 And I already know from past experience,
23 having lived on the sea coast in Alaska, and watched the
24 ecological changes that take place when construction
25 projects like this go in, there are going to be changes.

26

1 And the concerns that these people have put forward are real
2 and they need to be addressed.

3 The dealings with our real estate; that's
4 another one that needs to be addressed.

5 I didn't retire from law enforcement and
6 move out to Pembroke -- and bless these people's hearts,
7 they put up with me -- to have everything changed by having
8 a major construction project come in and alter the face of
9 the land and change that the way that the ocean and this bay
10 operate.

11 I can see, despite your counsel in regards
12 to this, with those turbines and everything that are going
13 on, that the wildlife and the sea life and everything that's
14 going on around in this bay is going to suffer for it. And
15 the statements that have been made in regards to the
16 complications and the current changes and food chain are
17 also going to be affected. There's no way to change that.

18 You're going to be putting a major
19 construction project right in the middle of an important
20 part of this bay, and it is going to change things. And
21 it's not going to be for the better. I've seen this happen
22 too many times and when I was younger I was involved in
23 construction projects and saw it myself. And I don't advise
24 it. I personally am against the project.

25 Thank you.

26

1 MR. ATIYA: Well, let me just respond by
2 saying I hope that you keep an open mind. And, you know, we
3 have put a great deal of effort into addressing the kinds of
4 questions and the kind of changes that result from tidal
5 range power. And, you know, we'd like the opportunity for
6 you to listen to us with an open mind, you know, to assess
7 what it is that we are proposing, and then to make up your
8 mind.

9 So, you know, perhaps this is not the time
10 to do it. But, you know, I would like to propose another
11 meeting with the community a month or so in the future that
12 you in fact address questions and comments to me in
13 particular, and that we, you know, begin the dialogue to,
14 you know, give us a chance to -- give us the opportunity to
15 let you know what it is we're doing and why we in fact think
16 that this is an environmentally sound approach to power
17 generation.

18 MR. DE VANEY: We're open to that.

19 MR. ATIYA: Very good. That's all we ask.

20 DR. SANFILLIPO: Dr. Stephen Sanfillipo
21 again, a long-time occupant in Pembroke; born and spent my
22 boyhood in New York City, greatest city in the world.
23 People can move there.

24 (Laughter.)

25 DR. SANFILLIPO: It's got a lot of vacant
26

1 apartments and some beautiful sections in Whitestone, Queens
2 and Park Slope, Brooklyn.

3 I didn't come to Pembroke to be by a power
4 plant. It's personal.

5 I'm concerned about something with the way
6 this meeting was conducted, which is that when the
7 questioning started we were told that the recorder would
8 then read the questions and they would be answered at that
9 time. A lot of us have work to do tomorrow. But I think a
10 lot of us also have all night.

11 Thank you.

12 MR. ATIYA: Okay. Well, I personally am
13 glad to continue this meeting with you perhaps in an
14 unofficial capacity.

15 MR. PALSO: No, we can continue.

16 Regarding the reading back, we didn't agree
17 to read back. We don't have a court -- the court reporter
18 is recording.

19 Pennamaquan, they took notes. And we were
20 going to answer as much -- but we got a lot more questions
21 than we were anticipating.

22 DR. SANFILLIPO: I'm sorry, but I think
23 everybody here would agree that the way things started we
24 were told we'd get answers to all the questions.

25 MS. DAVIDSON: Sir, we did that just so
26

1 that we could let everybody speak and we wouldn't spend, you
2 know, overnight just letting everybody speak.

3 MR. PALSO: We can get to answer as many
4 questions as we can.

5 MR. ATIYA: And also --

6 MR. PALSO: People -- you know, you just --
7 I don't want to discourage you from asking questions, but
8 everyone's been asking more and more questions and we
9 haven't been able to get to the answer phase yet.

10 MR. ATIYA: And also I would like to just
11 point out that some of the questions, no one's going to be
12 able to answer them for perhaps a couple years until the
13 studies have been conducted. And some of the questions we
14 can answer, like: Where are you from? Salt Lake City. Or
15 what's going to be the height on this thing at mean tide.
16 And I think that question got answered.

17 So basically the simple questions can be
18 answered tonight and the difficult questions need study to
19 answer. And that's why we're at the beginning and no one is
20 making a decision right now. The Commission won't be making
21 a decision. The applicant hasn't made all of its final
22 decisions on design because it's waiting for the results of
23 studies, aesthetic studies, for example, noise studies,
24 those sorts of things.

25 So I understand that there are a lot of
26

1 questions that have been asked and are in the record
2 tonight. But they'll kind of help us move forward from
3 tonight. A lot of those questions just have to stay out
4 there unanswered until the studies have been conducted.

5 MR. PALSO: Uh-huh.

6 And Ramez has been scribbling furiously
7 taking down your questions. So if we let him answer it and
8 if people can I guess hold off any more questions, it seems
9 that every time he answers it generates many more questions
10 --

11 MR. PALSO: Yeah. It's the nature of the
12 beast.

13 MR. DE VANEY: Well, you know we're
14 interested.

15 MR. PALSO: Right. But we can't move
16 forward and getting more answers for people.

17 So if -- we'll let him go through the list
18 and answer as many as he can. Maybe we can, you know,
19 satisfy some of your curiosities the best we can.

20 MR. PALSO: Okay. So let me try to answer
21 these -- let me try to provide answers to some of these
22 questions briefly. And clearly I can't get into detail
23 here. But, you know, there are certain general features
24 that we've worked on here.

25 First is this parallel cycle, because what
26

1 it does is it maintains the natural flow in and out of the
2 estuary. It maintains the natural levels in the estuary.
3 It exposes the inter-tidal zones just as it would if this
4 plant weren't there. It submerges it just as if the plant
5 were not there. And so therefore what it does is it
6 basically leaves the estuary unchanged. That's the basic
7 premise here.

8 Now there are a host of details and
9 questions, you know, which will come up and which will need
10 to be answered. But the fundamental approach here is to
11 actually make it so that the tide rises and falls in its
12 natural cycle within the bay. And that is necessary in
13 order to maintain both the ecology -- the hydrology and the
14 ecology of the bay.

15 Now exactly how that works out is something
16 that requires, you know, detailed answers. That's one
17 aspect of it.

18 From the other comments actually were that
19 this is an experimental project. Well, experimental has
20 many meanings. And this is important on several counts.

21 The technology that is used in the
22 construction of the plant is not experimental. What is new
23 about this construction is the application; not the
24 construction itself. As far as the turbines themselves,
25 these have been employed now for over 60 years and they are
26

1 thoroughly understood.

2 So, you know, when we make claims about
3 being able to do certain things with these turbines, this is
4 well documented in 60 years of operation. So the plant is
5 not experimental in that sense.

6 What is -- operating this as a research
7 plant means doing things like, for example, what kind of
8 turbine improvements can be made; what kind of improvements
9 to the shape of the blade can be made. You know, are there
10 better generators that we can in fact use. These are these
11 kinds of questions.

12 Suppose for example that rather than
13 raising and lowering the tides to their natural level on
14 every single tide, we raised the level higher during summer
15 months when the inter-tidal flats tend to dry out. We
16 believe actually that this will raise the productivity of
17 the estuary.

18 You know, these are issues where we would
19 in fact try to optimize the operation. So in that sense
20 it's a research facility. It's not a research facility in
21 the sense that, you know, this is a construction method that
22 is un-understood or turbines that are not understood. It's
23 these kinds of issues that make it a research facility.

24 On the boatlock. I see, you know, we have
25 access for fishing vessels. But the question had arisen
26

1 about small craft, I mean kayaks, canoes and so on. And
2 this is something we have not addressed at all. This is
3 something that we would address with you in the future and
4 find the resolution to it.

5 There are specific technical issues as far
6 as the biology is concerned. For example, the issue of
7 elvers, you know, how do they migrate, where do they
8 migrate. These are issues that are going to be included in
9 the kind of studies that Steve Kartalia was talking about.

10 So, you know, these are all studies that
11 need to be done. And, you know, we would like to work with
12 you in terms of the design of these studies in order to get
13 local knowledge, as well as knowledge of experts such as Dr.
14 Seeley, who obviously, you know, has spent a lifetime
15 working on these issues.

16 But I hope that you will keep an open mind
17 about this project because I think tidal range power is here
18 and now power. We can do this. If we had a license we
19 could start constructing this within a year. We could do
20 this on a worldwide basis. It's cost effective power. And
21 that's something that can't be said of other sources.

22 In other words, you know, when we look at
23 things like offshore wind, it's a great source of power.
24 But it's also an extremely expensive source of power.

25 So we've got to have a way of generating
26

1 power that is actually low-cost power and low-environmental
2 impact. We believe that this is low environmental impact.
3 And we're willing to back that up and to discuss it with you
4 and to communicate with you in a way where I think, you
5 know, we can reach consensus here.

6 So this is the beginning of our
7 communications. And I think that that addresses some of the
8 questions that you had. Other questions are questions of
9 industrialization. We don't need to industrialize this
10 area. You know, if the communities don't want
11 industrialization, it's not necessary. You can just simply
12 prevent it.

13 Power is distributed everywhere. It's a
14 whole regional issue. It's not a local issue. But we can
15 also design this in such a way that this is a community
16 power plant. I mean these are their options and there are
17 legal mechanisms for doing that. So these are things that
18 we would investigate with you.

19 As far as the impact of the plant on
20 detail, these are things that really require definite
21 studies. For example, what is -- when you place a plant
22 like this what does it do to wave action, because wave
23 action actually has consequences. But by blocking wave
24 action is not necessarily a negative impact because in fact
25 if you block wave action you get the development of salt
26

1 marshes.

2 And so, you know, the development of salt
3 marshes is a possible, you know, positive outcome of this.
4 And this was pointed out by Dr. Graham Daborn, who is the
5 head of the Estuarine Institute at Acadia University.

6 You know, so these are issues that will
7 have to be looked at. And that's the study part of this.
8 We just need to compile a list of the studies that need to
9 be done.

10 And I think, given the fact that we
11 maintain the hydrology, the flow rate, and the inter-tidal
12 zones, I think we will find that the impact of this is going
13 to be relatively small.

14 It doesn't mean that there isn't going to
15 be any impact at all. There is no way of constructing a
16 facility without having impact. There will be impact. I
17 think you're absolutely right. It's just that I think that
18 the benefits that we will all accrue from this plant
19 outweigh the costs associated. And to establish that
20 requires a dialogue.

21 So perhaps in another month and a half, you
22 know, we can begin a dialogue through Mr. Jamison. He can
23 give you my email address, my telephone number. I'll give
24 you my card now, you know. And, you know, we can then
25 follow it up with a meeting and several meetings afterwards.

26

1 And so I hope, you know, you will keep an
2 open mind because we have in fact worked very hard. And our
3 premise has not been to build a plant and then worry about
4 the environmental consequences first. We have in fact asked
5 what are the environmental consequences of tidal range
6 power. We've tried to resolve them up front as part and
7 parcel of the engineering process.

8 MR. VERRILL: Just one comment I want to
9 make. There was a gentleman who asked a question or just
10 raised a question -- I'm sorry. I'm Ted Verrill. I'm the
11 chief financial officer of Halcyon Tidal Power, which is a
12 Maine-based limited liability company.

13 The gentleman asked a question or raised a
14 question about how many households will be served by this
15 particular facility given its output. I did check my
16 figures. It's a minimum of 10,000 homes based on 700
17 kilowatt hours of power used per month.

18 UNIDENTIFIED PARTICIPANT: You mentioned
19 the number of houses. But where?

20 UNIDENTIFIED PARTICIPANT: Where.

21 MR. VERRILL: Wherever the power is
22 distributed by the transmission company.

23 UNIDENTIFIED PARTICIPANT: That still
24 doesn't address our area.

25 MR. ATIYA: Yeah. Unfortunately, the way
26

1 power is organized, it's organized as a transmission system.
2 And so, you know, so power goes all over the place.

3 Now there may be ways of doing this. I
4 mean one of the things we, for example, asked our attorneys
5 in Maine to do is to take a look at the possibility of
6 developing this as community power. But that requires
7 legislation.

8 And so these are things that would require
9 dialogue again between you and between us in terms of what
10 we could do together in order to do that and whether that
11 would be beneficial.

12 MR. DE VANEY: I appreciate that. William
13 DeVaney again.

14 The reason why I raised the question is
15 because 10,000 homes is great, but 10,000 homes in what
16 area. It's a simple question. I don't think it's too
17 arbitrary.

18 MR. ATIYA: Yeah.

19 MR. DE VANEY: They'll take care of that.

20 We've got Bangor Hydro we're dealing with,
21 too. I mean there's a lot of issues in regards to that.

22 But as my wife pointed out, having been
23 raised in Alaska as a subsistence fishermen, and so I've
24 been on both sides of the coin here. I've worked as a law
25 enforcement officer in the cities and I've also lived off

26

1 the land most of my life in Alaska. And the concerns that
2 these people are presenting is real.

3 MR. ATIYA: Absolutely.

4 MR. DE VANEY: So when we're having this
5 dialogue --

6 MR. ATIYA: Yeah.

7 MR. DE VANEY: -- we'd like to be able to
8 have the questions answered as best as we can.

9 MR. ATIYA: Yeah.

10 And you see, these concerns are concerns
11 that we also had. And we had them up front because, you
12 know, we're aware of a lot of the concerns that have been --
13 that traditional tidal power developments have resulted in.
14 And so our approach was to try and design this in a way
15 which addressed a lot of these questions.

16 I mean, for example, activities that occurs
17 on the mud flats. You know, exposing and submerging the mud
18 flats to their natural levels is part of that. And so this
19 is part of a whole cluster of answers that we have to these
20 kinds of questions. But they also are going to leave a
21 cluster of unanswered questions.

22 This is the sort of thing that -- the elver
23 person -- I'm sorry, is that Julie Keene? Am I right?

24 You know, these are the kinds -- this is
25 the kind of input that we need, and this is the kind of
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1 dialogue that we need to have.

2 So what I ask you most of all to come away
3 from this meeting is an open mind and a spirit of discussion
4 with us about these, because we really have tried very hard.
5 I mean I'm almost 70 years old. I'm not doing this because,
6 you know, it will help me retire.

7 I'm doing this, you know, because I believe
8 that we need power; that we need power that is affordable.
9 That we need to have actually power that can be built now
10 that doesn't require 20 years of research to bring down the
11 costs. You know, we have huge problems and I believe that
12 this is part of addressing those problems.

13 So a dialogue that explains how it is what
14 we do this is essential, is essential here.

15 MR. PALSO: At this time does anybody have
16 any questions or comments about something that we haven't
17 discussed already, something new to add?

18 MS. LEWEY: I would like to speak. The
19 studies -- and this is Jamie Lewey, L-e-w-e-y.

20 These studies are going to be done by whom?
21 By FERC?

22 MR. KARTALIA: No. We're going to tell
23 them what studies they have to do.

24 MS. LEWEY: And they're --

25 MR. KARTALIA: And that's going to be based
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1 on input that comes in between now and November 13th, and
2 then the study plan development process that comes from that
3 where we hold meetings and talk about specific details of
4 the study, where the sampling sites would be, what the
5 scope, how far up the river migratory fish should be
6 studied, how far along the coastline mollusks and
7 crustaceans should be surveyed, those sorts of specific
8 details about the study.

9 Then in May is when the Commission issues
10 its study plan determination where we tell them, 'These are
11 the studies you're required to do; go do them.' They have
12 to hire consultants that are knowledgeable to do these.

13 And during the --

14 MS. LEWEY: Is there criteria for those
15 consultants? Does FERC set forth criteria?

16 UNIDENTIFIED PARTICIPANT: Could I ask --

17 MR. KARTALIA: Well, we can't --

18 UNIDENTIFIED PARTICIPANT: -- email address
19 and number, if I may?

20 MR. KARTALIA: We can't tell them who to
21 hire, if that's what you mean.

22 MS. LEWEY: No, I said criteria.

23 MR. KARTALIA: I'm sorry.

24 MS. LEWEY: I'm sorry.

25 MR. KARTALIA: No, it's probably just not
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1 understanding your question. Criteria for who conducts the
2 studies?

3 Well, it could be a range. I mean usually
4 they're private consulting firms, environmental consulting
5 firms that collect the data. Sometimes those firms hire
6 people in the specific project area, possibly fishermen from
7 this area. They might hire boats to do some of these
8 surveys.

9 I mean it depends on who gets hired and
10 what resources they have, how much they have to bring their
11 own equipment here versus use people who So I don't know.

12 But there's no way the studies are going to
13 be conducted by people who don't know anything about what
14 they're doing. I mean they're going to -- the studies are
15 going to be -- the study plans are going to be reviewed by
16 people who know what those types of studies need to contain.
17 And then it will be up to Pennamaquan Tidal to hire someone
18 who can do it the right way.

19 MS. LEWEY: And then you review?

20 MR. PALSO: Yeah. There is a review of the
21 study results.

22 It's like -- for a complex project like
23 this there's usually two years of study. After the first
24 year of study there is a meeting and everything is reviewed.
25 And it's often determined if more study is needed in some

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1 area, if something needs to be altered, if we're not getting
2 the type of information we hope to get. And all this study
3 information is out there in public.

4 I think the only things that they keep
5 secret are sensitive archeological sites because they don't
6 want a risk of vandalism.

7 MR. KARTALIA: Do you have follow-up on
8 that?

9 MR. PALSO: Yeah.

10 MS. LEWEY: I have -- just in the record,
11 there's

12 Julie, when you spoke today, there's a
13 piece of this that's not scientific. There's a piece of
14 this that's existential. And there's a piece of this that's
15 deep in my culture about the relationship, you know, to the
16 land and what the water is and the water as sacred, and as
17 particularly sacred where fresh and saltwater meet. And
18 there's a part of this that just -- I could hear it when you
19 were talking. There's core. There's core. And I just
20 don't know how a study is ever going to get to that.

21 And when the framework is we'll sit down
22 and we can make this work, what if it doesn't? And is there
23 enough respect to say, 'We respect the people that are
24 living out their lives here. We respect the Tribal people
25 who have a unique relationship. We respect the fisher
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1 people who have a unique relationship,' and say, 'Okay, it
2 was good to meet each other.'

3 Is there any -- I mean I feel like I don't
4 even know if there's a way to do that.

5 MS. DAVIDSON: That's all a part of this as
6 well. Cultural resources have just as much weight as
7 fisheries, recreation, everything. So part of a cultural or
8 Tribal study -- or studies -- would be to collect that
9 information that, you know, we don't know, you know, what
10 and why is sacred.

11 So we need that information. And a
12 cultural and/or Tribal study would identify that information
13 and put it on the table for it to be analyzed in our
14 environmental document.

15 MR. PALSO: And also keep in mind this is
16 not a set project. I mean they're hoping to get a license.
17 There's a lot of years in this.

18 And, you know, I'm not saying this project
19 has anything that will make it fall through, but projects do
20 fall through. You know, projects reach a stage where a
21 license isn't granted.

22 In an environmental assessment it could
23 come out that the impacts of this are just too great; it
24 would have a significant effect on the environment and, you
25 know, they won't issue a license. There can also be

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1 conditions on the project set forth by different
2 environmental groups that would make the project too
3 prohibitively costly or it would reduce the amount of power
4 it would generate to make a profit.

5 And you know, it's often the case that
6 perhaps maybe, you know, the project is just -- they have to
7 give it up because our requirements are they would have to
8 follow those mandatory conditions.

9 So this is a big process and we're working
10 to find out as much as we can; how much opposition there is.
11 And like we found today, there is a whole lot of information
12 we got here that we did not previously know. But it's all
13 going in the record and it's all going to be considered when
14 we look at all our different studies.

15 Does anybody else have any comments?

16 (No response.)

17 MR. PALSO: No? Okay. Well, it's almost
18 nine o'clock. So at this point I'll close the meeting.
19 Thank you very much for coming.

20 (Applause.)

21 (Whereupon, at 9:00 p.m. the scoping
22 meeting in the Pennamaquan Tidal Power Plant Project was
23 adjourned.)

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