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Maine Land Use Regulation Commission

Public Hearing Concerning  
Development Permit DP 4889  
Champlain Wind, LLC  
Bowers Mountain Wind Project  
Carroll Plantation, Penobscot County  
Kossuth Township, Washington County

Wednesday, July 6, 2011

Held at the Spectacular Event Center  
395 Griffin Road  
Bangor, Maine

Don Thompson & Associates  
Court Reporting



1 MS. HORN OLSEN: Samantha Horn Olsen, LURC staff.

2 MS. HILTON: And we also have Scott Perrow who is  
3 providing our recording services here, and Jim Palmer, our  
4 scenic expert, over in the -- near the windows there. I  
5 think we're going to -- since there's so many folks here,  
6 we're going to forego having introduction of individuals in  
7 the audience.

8 I do want to thank everyone for being here and, I  
9 guess, in particular our State agency representatives who  
10 have come here today to assist us in review of this  
11 application.

12 I have my formal opening statement here. Today's  
13 hearing is being held pursuant to the provisions of  
14 12 M.R.S.A. Section 685-B. The hearing will be conducted  
15 in accordance with the Administrative Procedures Act and  
16 Chapter 5 of the Commission's rules for the conduct of  
17 public hearing.

18 Today's hearing is a continuation of the hearing begun  
19 in Lincoln on June 27th and 28th, 2011 to receive testimony  
20 on the matter of Development Permit DP 4889 submitted by  
21 Champlain Wind, LLC to construct a 69.1 megawatt wind  
22 energy development in Carroll Plantation, Penobscot County  
23 and Kossuth Township, Washington County.

24 The purpose of today's session is to provide an  
25 opportunity for the commission, staff and parties to ask

1 questions of review agencies and consultants to assist the  
2 commission in determining whether the development proposal  
3 meets the criteria for approval as specified in 12 M.R.S.A.  
4 Section 685-B(4) and (4-B) of the Commission statutes and  
5 the Commission's Land Use Districts and Standards.

6 Representatives of the applicant will first provide a  
7 summary of the proposal. Questioning of witnesses may be  
8 conducted first by the commission, then by the staff, next  
9 by the applicant and then by the intervenors. However,  
10 commission members, staff and counsel for the commission  
11 may ask questions at any time.

12 All witnesses must be sworn and will be required before  
13 they give testimony to state for the record their name,  
14 residence, business or professional affiliation, the nature  
15 of their interest in the hearing and whether or not they  
16 represent another individual, firm or other legal entity  
17 for the purpose of the hearing.

18 In addition to being transcribed, we will be recording  
19 the proceedings today, so I request that you speak clearly  
20 and not too quickly. All questions and testimony must be  
21 relevant to the Commission's criteria for approval for this  
22 proposal. Irrelevant or unduly repetitious materials or  
23 questions will be excluded.

24 The record of this hearing will remain open until  
25 Monday, July 18th to receive written statements from the

1 interested public and for an additional seven days until  
2 Monday, July 25th for the purpose of receiving rebuttal  
3 comments. No additional evidence or testimony will be  
4 allowed into the record after the closing of the record.

5 Persons attending the hearing who wish to receive a  
6 copy of the final action taken by the Commission as a  
7 result of this hearing may leave their names and  
8 address with the staff.

9 At this time I would like to swear in any witnesses who  
10 plan to testify today. And I guess if you could please  
11 stand up and raise your right hand. Is that everyone? All  
12 right. Do you solemnly swear to tell the whole truth and  
13 nothing but the truth?

14 PARTICIPANTS: I do.

15 MS. HILTON: All right. Thank you very much. Okay.  
16 So I guess the applicant -- we're looking for a  
17 presentation from you folks. Who's going to do that?

18 MS. PRESCOTT: I am.

19 MS. HILTON: You are. Okay.

20 MS. PRESCOTT: Good morning. I'm Joy Prescott with  
21 Stantec. I'm going to provide a brief overview of the  
22 project, which will be similar to that which you heard last  
23 week.

24 Bowers is being proposed by Champlain Wind, which is a  
25 subsidiary of First Wind, who has constructed and is

1 operating several grid scale projects throughout Maine.  
2 And it is located in Carroll Plantation in Kossuth  
3 Township, as you can see on this map here. Unfortunately,  
4 I don't have my pointer, but it's the same map we showed at  
5 the hearing last week.

6 But it will be up to 27 turbines located on three lower  
7 elevation ridge lines which range in elevation from 750 to  
8 1,100 feet. And it will -- each of the turbines will be  
9 connected by access roads and there will be 9.8 miles of  
10 existing roads and 1.8 miles of improvements to -- sorry,  
11 9.8 miles of new roads and 1.8 miles of improvements to  
12 existing roads.

13 And Champlain has conducted a full suite of  
14 environmental surveys including two seasons of radar bird  
15 surveys, two seasons of raptor surveys, three seasons of  
16 bat surveys. And these results showed consistent with  
17 surveys conducted at other locations both in Maine and  
18 New England. And we also conducted a full suite of both  
19 wetland delineation surveys and vernal pool surveys. And  
20 from those surveys there was -- the design was able to  
21 avoid most of the impacts to any wetland or vernal pool  
22 resources. There is 0.10 acres of wetland fill and 3.79  
23 acres of clearing in wetlands, primarily under the  
24 electrical collector line.

25 And the electrical collector line collects power from

1 each of the turbines and then runs north across Route 6 for  
2 approximately 5.2 miles to a substation that's located  
3 adjacent to Line 56, which was the -- which Line 56 was  
4 built for the existing Stetson project.

5 In addition to those surveys, a suite of both historic  
6 architecture and precontact archeological surveys were done  
7 and found that there would be no impacts to resources in  
8 those areas. And in addition, a visual impact assessment  
9 was conducted by LandWorks in which they evaluated the  
10 scenic resources in the area. And there are two types of  
11 scenic resources. One is great ponds of scenic  
12 significance, either outstanding or significant. And there  
13 is also one historic -- historic -- location on the  
14 historic register which does not have visibility.

15 There are a total of 14 lakes with scenic significance  
16 within 8 miles. And this is probably a good point to point  
17 out that at last week's hearing there was a question raised  
18 about Pug Lake. And the applicant has consulted with LURC  
19 since last week and established that although initially we  
20 did not think that -- we thought that Pug Lake was a  
21 separate lake and was not scenic significance, we've worked  
22 with LURC and Palmer to identify that it is. And yesterday  
23 we provided an initial analysis of the visual impact from  
24 that location.

25 And overall there are nine lakes that would have

1 visibility of turbines within 8 miles, there are four lakes  
2 within 3 miles that would have visibility, and there are  
3 four lakes within the 3 to 8 miles that would have  
4 visibility, and then there are six lakes that would have no  
5 visibility within the -- within 8 miles of turbines.

6 LandWorks conducted the analysis and looked at the  
7 scenic -- the scenic significance and character of each of  
8 those lakes, the existing use and the likely impact of the  
9 turbines on those uses. And in summary concluded that  
10 there would be no undue adverse effect on any of those uses  
11 from the presence of those turbines.

12 In addition to the environmental considerations for the  
13 project, Champlain must also demonstrate significant  
14 tangible benefit for the host communities and for the  
15 state. And in this case there are several specific  
16 benefits that are included as part of the package. There  
17 is a community benefits agreement with Carroll Plantation  
18 for \$92,000 for the life of the project and for Kossuth --  
19 and with Washington Township it's 10,000 for the life of  
20 the project. And there will also be an energy fund that is  
21 set up for the residents of Kossuth Township that would be  
22 funded at \$20,000 initially and then \$15,000 for the life  
23 of the project. And, finally, there will be a conservation  
24 fund that's set up in cooperation with the Forest Society  
25 of Maine that is funded at \$120,000 initially and then



1           \$20,000 for the life of the project.

2           And overall the total benefits for the -- this -- for  
3 the tangible benefits package over the life of the 20 years  
4 of the project would be \$2,845,000.

5           And so in summary, Champlain has developed a project  
6 that has limited environmental impact but will provide  
7 significant economic impact to both the local community --  
8 local and regional economy directly and immediately. And  
9 with that we look forward to additional discussion this  
10 morning.

11           MS. HILTON: Thank you for that presentation. So I'm  
12 going to work with Fred here. I guess what we want to do  
13 is ask our consultants to -- or our State agency reps to  
14 come up to the table and --. I'll let you take it away.

15           MR. TODD: Well, intervenors had an opportunity, as  
16 well as the applicant, to request agency representatives or  
17 our consultants to be present today for questioning and  
18 cross-examination. Intervenors requested the presence of I  
19 F & W staff and Jim Palmer. At last week's session in  
20 Lincoln there was some question raised by Intervenor  
21 Corrigan about potential groundwater impacts from  
22 construction activities on Bowers Mountain to the watershed  
23 to the south of it. So I posed some questions to both DOC  
24 and DEP staff about that potential.

25           I'm going to pass out to the Commission an e-mail that

1           went to Bob Marvinney and John Hopeck -- Bob Marvinney is  
2           with the -- is a state geologist and John Hopeck is at DEP  
3           -- regarding the -- the potential for adverse groundwater  
4           quality impacts from construction activities on the  
5           mountain. I supplied a copy of that e-mail to the parties.  
6           I did not bring a lot of copies with me, I just had copies  
7           for the Commission.

8           But what I would suggest is the order to proceed here  
9           is that we have John Hopeck come up and, basically,  
10          articulate what he responded -- how he responded to my  
11          question about potential groundwater impacts, and then that  
12          we go to I F & W staff on wildlife issues and then to Jim  
13          Palmer on scenic issues. I think potentially the questions  
14          of Jim Palmer will probably take up most of the time today,  
15          so I would rather get what I think will be the lesser  
16          time-consuming questions out of the way before we go to the  
17          scenic issues.

18          I would point out that Dave Rocque is also in the  
19          audience from the Department of Agriculture, the State soil  
20          scientist. The -- none of the intervenors or the applicant  
21          asked for him to be here, but he is here in case Commission  
22          or intervenors have a question of him. I will not ask him  
23          to come up unless somebody says that they actually have a  
24          -- they have a question of him. You do, Ed?

25          MR. LAVERTY: Just a quick question.

1 MR. TODD: So, actually, maybe we can start with --  
2 with Dave Rocque. Dave, if you would be willing to come  
3 up?

4 MR. ROCQUE: Good morning.

5 MS. HILTON: Good morning. Thank you for being here.

6 MR. ROCQUE: It's hot outside.

7 EXAMINATION OF DAVID ROCQUE

8 BY MR. LAVERTY:

9 Q Dave, I've just got a couple of really quick questions.  
10 One came up and as -- I believe it was testimony from the  
11 public that was -- concern was raised about blasting in the  
12 area associated with various projects that have been  
13 approved and the potential for creating or contributing to  
14 a major earthquake in Burlington in the recent past.

15 I know you're -- I mean, you're a soil scientist, but  
16 do you see any relationship between blasting on these  
17 project sites and earthquakes in the area?

18 A I'd have to say that that's not an area that I have any  
19 expertise in. So I probably would defer that to the state  
20 geologist and -- but not -- not be able to answer that.

21 Q Okay. Thank you very much for that. Could we get in the  
22 record something from the State geologist? I mean, this  
23 really ought to be put to rest, either that or explored.  
24 But it just seems that that ought to be --. I had a couple  
25 other things.

1           In your review comments you requested -- yeah, you  
2           requested that -- well, again, you requested that there  
3           should be additional blasting of rock for fill, that that  
4           would be taken care of that -- that's why I sort of thought  
5           you were the person to answer the blasting question, but I  
6           understand it. The other is that with regard to rock  
7           sandwiches, you -- I love this rock sandwiches and rock  
8           burrito thing. Whoever makes these terms up --

9    A    Food is good.

10   Q    They're wonderful. But you suggested that there be  
11        additional rock sandwiches and perhaps burritos used and  
12        replace culverts.

13   A    Right.

14   Q    In your view, were your comments responded to sufficiently  
15        by the applicant?

16   A    The comments that I made regarding those two features I  
17        think were addressed. One of them was that they didn't  
18        really indicate where the rock sandwich was going to be  
19        used. And they revised their plans and that detail  
20        explaining where it should be used, which was something I  
21        was very concerned with. I mean, I could look on the maps,  
22        figure out where I thought might be a good location, but  
23        when you get out into the field, it may be different and  
24        there may be places that weren't identified.

25                So they conditioned it to be used in certain locations,

1           which was as appropriate.  So I -- I think that was  
2           addressed properly.

3    Q       Okay.  So you feel comfortable with the application as it  
4           stands today?

5    A       For the most part.  There were still a couple of minor  
6           details.  I -- I did get in touch with the -- the project  
7           engineer about the lay-down areas because there was no  
8           provision for where or how those lay-down areas are going  
9           to be constructed.  Erosion sediment control, storm water  
10          and that kind of stuff and there should have been  
11          something.

12                 And the engineer indicated that that would be addressed  
13          before the project went out for construction.

14   Q       And you feel comfortable with that?

15   A       Yeah.  I mean, it's not rocket science, but it just needs  
16          to make sure that there is a procedure and they're not just  
17          built inappropriately.

18   Q       Okay.  So you don't see any loose ends here that need to be  
19          addressed, everything seems to be --

20   A       I feel pretty -- yeah.

21                 MR. LAVERTY:  Okay.  Thank you.

22                 MS. HILTON:  I don't have any questions, but I do want  
23          to say that we very much appreciate your attention to those  
24          details and thorough review that you give of it.

25                 MR. LAVERTY:  Yeah, it would be hard for us to do this

1 without you.

2 MR. ROCQUE: Well, I am glad to be able to be of  
3 service.

4 MS. HILTON: I think -- do you have anything else?  
5 Anybody else? Okay. Thank you, Dave.

6 MR. LAVERTY: Just another -- no, this is not to Dave.  
7 Thank you. I just wanted to say to Fred, there was another  
8 issue raised by the public comment and -- that I really --  
9 I think we need to, again, lay it to rest or pursue. And  
10 that was the idea that -- that there's been a number of  
11 forest fires -- or fires associated with wind power  
12 projects where turbines somehow burst into flame and create  
13 fire. Either this is an issue or it isn't an issue. And  
14 for the public in the Lincoln area, I think we owe to them  
15 to allay their fears about earthquakes and fires, if those  
16 can be allayed. If not, we need to address them.

17 MR. TODD: Okay. I did pose that question to the Maine  
18 Forest Service. And they have a -- a letter on file that  
19 was submitted prior to the record saying that they feel  
20 they can deal with potential forest fire danger from any  
21 activities around this development site. I put the  
22 question to them again because it came up in Lincoln. I  
23 said, you know, given -- and there was some recent press  
24 coverage about turbines catching fire. And they,  
25 basically, said their comments stand, they're not in the

1 business of fighting -- if a turbine catches on fire,  
2 they're not going to rush to put it out. If it starts  
3 burning in the brush, that's what they'll pay attention to.  
4 But they feel that -- that they're able to deal with what  
5 they perceive as potential woods fire from -- from this  
6 construction.

7 MR. LAVERTY: So they -- they feel that they're in a  
8 position to sufficiently provide for public safety.

9 MR. TODD: Right.

10 MR. LAVERTY: Thank you.

11 MR. TODD: I mean, I -- if you would like, I could get  
12 them to put that in writing, but they, basically, said, our  
13 opinion is as stated on the record, we don't see the need  
14 to add to it.

15 MR. LAVERTY: That's fine for me. I just -- you know,  
16 it was brought up by the people in Lincoln and I think, you  
17 know, we needed to make sure it's addressed. And it's been  
18 addressed and I think that's sufficient for our purposes.  
19 Don't you? Unless somebody else wants to do something.

20 MR. NADEAU: No, I had concerns, too, Ed. And I'm glad  
21 to hear that they're the ones that are going to be  
22 providing the fire protection because I don't believe that  
23 the communities in that area could do that because I don't  
24 think they would have the right equipment.

25 MS. HILTON: Is there anywhere in the application where

1           there is any statement on the part of the applicant as to  
2           what the protocols are if there is a fire associated with  
3           one of turbines? I don't know --.

4           MR. TODD: I couldn't say off the top of my head. You  
5           could pose that to the applicant.

6           MS. BROWNE: I don't think -- is this on -- I don't  
7           think there's anything specific in the application, but  
8           it's certainly something we could follow up on during the  
9           post-hearing comment section, because it's something we've  
10          actually addressed in some of the very early hearings  
11          before the Commission. But I think in particular the Kibby  
12          project there was substantial discussion about it. So we  
13          could certainly provide follow-up on that question.

14          MS. HILTON: I think that would good.

15          MR. LAVERTY: Yeah, that would be good.

16          MS. HILTON: Yeah. Thank you.

17          MS. MILLS: Amy Mills, AG's office. I just wanted to  
18          make sure that the State agency representatives don't leave  
19          until we're done with the hearing because the other  
20          parties, other than the commissioners and staff, might have  
21          questions for you. So if you could just stick around for  
22          the morning, that would be great.

23          MS. HILTON: Is there anything else on either of those  
24          two topics that we just spoke about? Okay. Fred, what's  
25          next?



1           MR. TODD: I would suggest that we have John Hopeck  
2 come up. As I mentioned earlier, I've passed out the --  
3 the series of e-mails back and forth between myself and  
4 John and Bob Marvinney. The commissioners have that in  
5 front of them, the parties have seen it before.

6           And I do appreciate John coming as a last-minute  
7 arrangement. I didn't contact him until late last week  
8 after we got back to Lincoln. So thanks for coming, John.

9           MR. HOPECK: Thanks, Fred.

10          MR. TODD: I guess what I would -- what I would suggest  
11 we do is if you could just articulate your response to my  
12 question.

13          MR. HOPECK: Sure. The sort of general issues related  
14 to water quality impacts of construction, particularly with  
15 regard to the blasting and other bedrock effects, what  
16 we've seen historically, not so much in Maine but in other  
17 states where there are larger construction projects, is  
18 that groundwater contamination due to blasting itself --

19          MS. HILTON: John, I'm sorry to stop you. Can you  
20 state your name and -- for the record and your agency?

21          MR. HOPECK: Sure. John Hopeck with the Department of  
22 Environmental Protection.

23          MS. HILTON: Okay. Go ahead. I'm sorry.

24          MR. HOPECK: Groundwater impacts from blasting usually  
25 have to do with nitrogen compounds in the -- in the

1 explosives. And typically where we see those, it's  
2 improper storage of the explosives, improper disposal of  
3 explosive cartons or of wastes, failure to clear up  
4 misfires, other things like that that have to do not with  
5 the explosives afterward, but more to do with -- with the  
6 waste and how that soluble and -- gets into the groundwater  
7 there.

8 There was recently a major problem in New Hampshire  
9 that was associated with a long duration construction of a  
10 road cut and they had some groundwater contamination from  
11 the blasting in those areas. But, again, that was an  
12 explosives storage issue and not an explosives use issue.  
13 Certainly there are issues with emissions plants in federal  
14 facilities that we know of this Cape Cod and Oregon and  
15 other places like that where there are nitrate issues and  
16 also where there's perchlorate issues.

17 We don't see those -- or have not seen those  
18 historically in Maine simply because the volume of  
19 explosives used and stored aren't anywhere near what they  
20 are and because we do monitor the sites -- we and the fire  
21 marshal's office monitor those sites pretty carefully.

22 ANFO is a very common explosive, it does use fuel oil.  
23 So, again, storage is potentially a problem. Usually  
24 that's mixed offsite, it's delivered to the site in a  
25 truck, loaded into the holes and fired that day, so there's

1 not a storage issue on site. Again, the actual sort of  
2 storage and transport of that is dealt with through the  
3 fire marshal's office, but it is routine in -- in Maine for  
4 that all to be done offsite. And there are, you know,  
5 except for the quarry operation, obviously, not a lot of  
6 explosives storage on the site itself.

7 So we don't really anticipate, if the blasting is  
8 conducted according to the principles that we go by and  
9 that we've recommended to the Commission, that the blasting  
10 itself is a major groundwater contamination issue. One  
11 thing we do have some concerns about in particular -- not  
12 so much down in the flat territories, but in these steeper  
13 environments where there's a potential for extended fill  
14 slopes, where there's the usage for the rock sandwiches,  
15 rock burritos, just general slopes of rock fill, is whether  
16 or not there's the potential for encountering reactive rock  
17 in some areas. And -- which is to say rock that could  
18 generate acidic drainage or that could leach metals.

19 We don't have anywhere -- you know, this is not -- it's  
20 not West Virginia, it's not Tennessee, it's not the  
21 portions of the Miramichi in New Brunswick where that's  
22 been an issue. Although, the reason we're concerned is  
23 that that belt in the Miramichi area, where in New  
24 Brunswick they have had problems, extends down into Maine  
25 and, in fact, into some of the area of this project. We

1 have seen gravel pits and quarries in some areas that have  
2 encountered some of this material where it's been a  
3 problem. Not a major problem -- again, I say it's not West  
4 Virginia, it's not Kentucky, anywhere like that where some  
5 of these rocks are major issues, and it's certainly not the  
6 mining operations that we see up in New Brunswick.

7 But it's something we want to be aware of, particularly  
8 if those rock types are put into areas where there's a lot  
9 of water moving through them, which you have in a fill  
10 slope, a rock burrito, a rock sandwich. And so we work  
11 with the applicant to do some preliminary surveys, we go  
12 out and look at the rock types. And it's not an  
13 unmanageable issue. Basically, you have to control the pH.

14 So where you've encountered them before, it's,  
15 basically, avoiding putting that into a fill slope, burying  
16 that rock type on site. They tend to be pretty discrete,  
17 small bodies that those rock types can be segregated pretty  
18 easily. They tend to be very easily recognized in the  
19 field so that the construction crews can recognize them  
20 once they're told what to look for. That's what we've seen  
21 on other sites where this has come up, they're very easy to  
22 recognize in the field.

23 And, again, there are -- there are simple solutions to  
24 manage them, whether it's burying them on site so that  
25 they're not exposed; if you do have an exposed area,

1 putting limestone rip rap in the drain instead of just  
2 other kinds of rip rap so that the limestone will raise the  
3 pH and prevent the -- the issues. And, again, it's not a  
4 major issue, but it is something that where these rock  
5 types might be put into a setting where there's the  
6 potential for leaching there is a relatively simple measure  
7 we can use to prevent that.

8 So far the -- you know, we haven't had a -- and it's an  
9 issue on these slopes, basically, because we're dealing  
10 with steep slopes. It's -- when you get down to other  
11 types of development in more level parts of the landscape,  
12 you don't have those extensive fill slopes, you don't have  
13 the same needs for things -- and certainly we're not  
14 encountering the rock type in many other areas of the  
15 state.

16 At this particular site, even though it is in that same  
17 belt, because of the proximity to the large granite body  
18 just off to the south of Bowers Mountain, the heating from  
19 that has altered many of these minerals to a -- to a more  
20 stable form so that we are less concerned about the  
21 potential for leaching that we might be at another setting.  
22 But, again, there are -- unusual things happen and so the  
23 applicant here is going to be using the same principle,  
24 same sort of method, same sort of field review of what they  
25 encounter during the project, that we have recommended and

1       it's, to our experience, worked successfully on other  
2       sites.

3             The general issue as far as temperature, certainly, you  
4       know, we know that headwater streams are particularly  
5       sensitive, that they may be spring fed. Certainly open  
6       areas do expose the ground to more sunlight and have the  
7       potential for, you know, creating warmer conditions, but in  
8       Maine in -- and, again, in most locations most of the  
9       groundwater is fed by snow melt. And so while the  
10      precipitation as rain on the ground, the temperature --  
11      that may be elevated somewhat. The temperature of the snow  
12      melt is going to be, basically, the temperature of melting  
13      water regardless of how open the site is.

14            So our experience is that unless it's influenced by a  
15      discharge from something, a leaking lagoon or something  
16      like that, say, the temperature of the groundwater is not  
17      going to vary that much and the exposed area, compared to  
18      the area of the entire watershed, which is going to be  
19      contributing a base flow to the streams, is so large that  
20      if you -- Dr. Marvinney addressed this point a little bit  
21      more specifically. If you look at the heat balance, the  
22      effect of opening up this area is going to be small to  
23      negligible on the temperature of groundwater in the  
24      streams.

25            The temperatures we worry more about are temperatures

1 of surface water where you have runoff coming off paved  
2 areas or developed areas. And that's why in this case --  
3 in this case and, again, in many other cases we encourage  
4 people to divert water to buffers -- to forested buffers so  
5 that water can filter through the soil and can, you know,  
6 be cooled, basically. So anybody who's dug a -- not even  
7 too deep a hole knows how cool it gets and you don't have  
8 to get down too far.

9 So we like to have that water sheeted off the site,  
10 allowed to filter down through the soil structure. And if  
11 it does have an elevated temperature because it is coming  
12 off an open area, it cools down by contact with that.

13 And if any member of the Commission or, Fred, you have  
14 other specific issues related to that, I would be happy to  
15 try and address them.

16 MS. HILTON: Commissioner questions? Fred?

17 MR. TODD: So the short answer is if -- if the usual  
18 construction precautions are taken in terms of controlling  
19 runoff, et cetera, that you don't see either groundwater  
20 quality or groundwater temperature being an issue with this  
21 particular project.

22 MR. HOPECK: No. I think that based on -- you know, if  
23 they follow the recommended procedures and operate in  
24 compliance with all the other statutes we have, you know --  
25 I know our standard is unreasonable adverse impact. So I

1           would never say no impact, but certainly there would be  
2           nothing for us that would qualify as an unreasonable  
3           impact, nothing that would adversely impact surface water  
4           quality. Certainly there are -- there are a small number  
5           of wells in the vicinity of the substation, but none in the  
6           area of the turbines or the -- except at the very end of  
7           the access road where it joins the Brown Road.

8           So I think that we would -- we would, in our case, make  
9           a finding of no unreasonable adverse impact, to use the --  
10          the DEP technical language.

11          MR. TODD: Thank you.

12          MR. LAVERTY: I guess I do have --. Just to be clear,  
13          I mean, from a layman's perspective, okay, it seems to me  
14          that one of the concerns here is not only wells, but we're  
15          looking at, you know, feeder streams for some damn high  
16          quality fisheries. And what we're concerned about  
17          ultimately is the impact on the fisheries. And so what  
18          we're saying is if the applicant follows the protocols  
19          recommended by DEP, that we have reason to believe that  
20          there will be no adverse impacts -- no unreasonable adverse  
21          impacts on fisheries?

22          MR. HOPECK: Yes, that's a reasonable conclusion.

23          MR. LAVERTY: That's where we are?

24          MR. HOPECK: Hm-hmm.

25          MR. LAVERTY: Thank you.



1 MS. HILTON: I guess that's all the questions we have.  
2 That was very helpful.

3 MR. HOPECK: Thank you.

4 MS. HILTON: Thank you very much. Okay. I guess the  
5 next folks we'd like to hear from are Fish & Wildlife.

6 MR. TODD: Mark and Steve, thanks for making the trip  
7 to Bangor today. There are three -- three issues that I  
8 wanted to pose questions on. The first one is the issue of  
9 lynx habitat, which there have been some correspondence  
10 amongst ourselves and the U.S. Fish & Wildlife Service.  
11 And most recently there was a report that was put into the  
12 record, I think it was dated mid June -- June 15 or 16,  
13 from Stantec to U.S. Fish & Wildlife Service in regards to  
14 a question they had posed earlier regarding potentially  
15 impact to lynx habitat.

16 My understanding is that U.S. Fish & Wildlife has not  
17 had a chance to review that report and comment on it, but I  
18 wonder if you folks have had any further conversations with  
19 U.S. Fish & Wildlife, or if you, yourself, would care to  
20 comment on that report.

21 MR. CARON: Mark Caron, Maine Fish & Wildlife out of  
22 the Enfield office. Fred, you're referring to the habitat  
23 assessment?

24 MR. TODD: Yes.

25 MR. CARON: Okay. I'll just state for the record that

1 I F & W didn't request this study, so we're -- you know,  
2 The Service is really the ones that ought to be responding  
3 to this and we understand that they haven't as yet.

4 Another point I just wanted to make is this is a  
5 standard request, I believe, that comes from The Service  
6 for these types of projects. And Stantec can correct me if  
7 I'm wrong on that. But the methodology used, I guess my  
8 question was, has that been worked out between The Service  
9 and the applicant and Stantec so that it's kind of routine  
10 and they know what they're asking for or is this something  
11 new? I don't know if it was or not.

12 And then I believe last Tuesday Ms. Prescott had asked  
13 in a phone conversation with Mark McCollough if he had had  
14 a chance to look at it, the data, I don't remember. He  
15 hadn't. I also requested back on Monday, June 27th in a  
16 phone call with Mark if he had looked at it then and he  
17 hadn't gotten to it yet, so here we are.

18 But with that said, I did review it. The habitat types  
19 that were focused on are in line with what lynx habitat and  
20 snowshoe hare habitat would be. I did not have any  
21 concerns with that. I think the wording -- the Stantec  
22 information is -- came right out of other documents that  
23 The Service has -- had presented when they described lynx  
24 habitat. And I have no reason to -- to disagree with it.  
25 And I -- I think what Stantec presented here for the type

1 of habitats that they were reviewing were fine, they --  
2 they're acceptable to I F & W.

3 The methodology that they did use is acceptable to  
4 I F & W, photo interpretation to delineate stand-type  
5 information. It's similar to what we've used with many  
6 projects in the past including lynx survey work in the  
7 eastern lowlands region. When we did some work there in  
8 the past, we -- we did -- we used photo interp, habitat  
9 modeling, that sort of a thing. So that's in line with  
10 that.

11 The results focused on current conditions within the  
12 project area and suggest -- and I was not surprised by the  
13 results, small patches of conforming habitat-type scattered  
14 throughout. It's -- it's really a hardwood dominated area  
15 to a large extent. So I wouldn't expect to see a lot of  
16 lynx, snowshoe-hare-type habitat in large contiguous blocks  
17 in there. And the discussion about loss of habitat, there  
18 may be some minor loss of habitat related to the  
19 construction work. Probably gain -- arguably gain a little  
20 bit of habitat, too, over time as things are reforested or  
21 come on line.

22 I guess the only other question I had is -- and I'm not  
23 familiar with the -- the arrangement that the applicant has  
24 made with landowners there, if there's going to be  
25 additional harvesting operations in that greater area or

1 not. And those are all unknowns that could influence  
2 habitat over time. But, again, that's -- I mean, based on  
3 what was asked for -- and I'm assuming that Stantec  
4 provided what Mark McCollough asked for -- I F & W has no  
5 major concerns with this report.

6 MR. TODD: Okay. Thanks. I'm told by our timekeeper  
7 that our time is running out for the Commission and staff.  
8 But just quickly, what's your understanding between you and  
9 the applicant on the status of curtailment of operations  
10 for -- to avoid bat -- to minimize bat mortality and the  
11 post-construction avian fatality studies?

12 MR. TIMPANO: I'm Steve Timpano, environmental  
13 coordinator with Maine Inland Fisheries & Wildlife  
14 Department. And we -- as I think was pretty well concluded  
15 at the Bull Hill project hearing, we have made the  
16 recommendation for curtailment or not operating the  
17 turbines until wind speeds are above 5 meters per second,  
18 which is the point at which bat activity diminishes in the  
19 vicinity of the project turbines -- or bat activity overall  
20 regardless of where it would be, but to minimize the risk  
21 of impact to bats that were resident in the area. And so  
22 we had made that recommendation.

23 And Stantec and the applicant worked to develop a  
24 curtailment study proposal. And it's -- it's modeled after  
25 one that is going to be undertaken at a project in Vermont,

1 the Sheffield project, Sheffield study, is the way we refer  
2 to it. At this point in time we're still awaiting -- and  
3 on good terms planning to work with the applicant and  
4 develop a final study plan to be implemented when the  
5 project is ready to go operational.

6 And the way it's set up right now with the Bull Hill  
7 project, half the turbines would be operated at all wind  
8 speeds, that is, as soon as there was wind enough to turn  
9 them, and that half of them would be held stationary until  
10 the wind got above 5 meters per second. And then there  
11 would be post-construction mortality studies done in  
12 connection with that to determine if, in fact, the -- there  
13 was a difference -- an observable difference in mortalities  
14 with those two replicates.

15 And adding the -- the Bowers project to that study  
16 would be very beneficial in increasing the sample size, the  
17 number of turbines that could be studied. So we agreed to  
18 the -- as I say, at this point, until the final plan is  
19 developed, I consider it at least a conceptual plan. We  
20 agreed that the conceptual outline for the Bull Hill  
21 project, we're entirely willing to move forward with that  
22 same conceptual planning effort for the Bowers project.  
23 And I assume that it would be conditioned in any permit  
24 that is subject to final approval by you the Commission or  
25 staff, however. So that's where we stand with it.

1           MR. LAVERTY: So there's no -- you and the applicant  
2 are working cooperatively on this now, there's no  
3 difference of opinion, the conceptual -- there may be some  
4 devil in its details, but the conceptual plan is agreed  
5 upon by you and the applicant; that's your understanding?

6           MR. TIMPANO: That's the way we are planning to move  
7 forward. It will be a collaborative, cooperative effort.

8           MR. LAVERTY: Thank you.

9           MS. HILTON: Any other questions, commissioners?

10          MR. HAMMOND: Just one. Let's say they do these  
11 studies and they find out that there is more fatalities for  
12 the -- for the turbines that are turning; is there anything  
13 that's going to happen once we know that?

14          MR. TIMPANO: You mean in terms of --

15          MR. HAMMOND: Making all the turbines --

16          MR. TIMPANO: -- project operations?

17          MR. HAMMOND: Yes.

18          MR. TIMPANO: Okay. And that -- I guess that is the  
19 crux of it. I mean, once you do the study and reach the  
20 determinations from it, then what do you do with it? And  
21 our intent would be that it would be -- the project would  
22 be operated such that turbines were not rotating or causing  
23 risk up to whatever -- you know, if it's 5 meters per  
24 second wind speed or whatever wind speed we study. And  
25 that that would be -- become the mode of operation for the

1 project curtailment up to asap.

2 MR. HAMMOND: And this is in agreement with the  
3 applicant and your --?

4 MR. TIMPANO: Yes, I -- I'm assuming so or they  
5 wouldn't be undertaking the studies.

6 MR. HAMMOND: The point is there's no sense having the  
7 study if we don't do something with it, right?

8 MR. TIMPANO: Correct.

9 MR. HAMMOND: And so I guess my question would be --  
10 and perhaps you can help us with it, Fred, but --. If  
11 that's the case, I have no problem.

12 MR. TODD: That's my understanding. I see the  
13 applicant shaking -- nodding their head that they're  
14 comfortable with that.

15 MR. HAMMOND: Okay. Thank you.

16 MS. HILTON: I think that is key. And in the Bull Hill  
17 project wasn't there such a -- a written agreement? Yeah.  
18 Okay.

19 MS. BROWNE: I mean, just to clarify, in Bull Hill  
20 following the hearing the applicant submitted a proposed  
21 language for a condition that essentially after the study  
22 was completed, the results of the study and any proposed  
23 change in operations would be submitted to the Commission  
24 for the Commission's review and approval. So there's a  
25 mechanism for the Commission to come back and decide

1 ultimately whether adjustments in operation are appropriate  
2 based on the results of the study.

3 MR. LAVERTY: My assumption is that that similar  
4 condition would be attached to this approval; is that  
5 correct?

6 MR. TODD: Yes.

7 MR. LAVERTY: Thanks.

8 MS. HILTON: Okay. Any other questions, concerns?  
9 Okay. I guess, very good. Thank you very much. So I  
10 guess we're going to tackle the scenic issues. And, Jim,  
11 if you'd like to come up.

12 So do commissioners want to ask questions first here or  
13 shall we have Fred take the lead? I guess we're looking to  
14 you to --.

15 MR. LAVERTY: I just wanted to ask -- I had the  
16 opportunity to engage, I thought, in pretty interesting  
17 dialogue with both Jim and the applicant's visual expert,  
18 so I -- at the hearing, previous hearing, I think it was  
19 what Tuesday morning, so --. I want to thank you guys for  
20 entertaining that kind of -- kind of twisting and curving  
21 and up and down, but it was a very interesting discussion I  
22 thought, so --. I'm interested in what Fred has to ask.

23 MR. TODD: Okay. I -- I have several questions and I  
24 could probably chew up a lot of time. I'm just trying to  
25 focus on what seems to be the most important, at least to



1 me.

2 EXAMINATION OF JIM PALMER

3 BY MR. TODD:

4 Q Jim, in your report dated June 3rd, the review of the  
5 Bowers wind project VIA, there's a table -- Table 4 on  
6 Page 32 which has a number of columns which are -- there's  
7 two columns which are titled VIA. I assume that's  
8 LandWorks' VIA; is that correct?

9 A Yes, that's correct.

10 Q And the reason I ask that is because the -- your analysis  
11 of the number of turbines visible from the -- the different  
12 lakes there would indicate that there's a potential for  
13 visibility from three of the lakes, which they indicate  
14 there is no visibility, specifically Horseshoe, Norway and  
15 West Musquash.

16 Can you explain why your table has different results?

17 A Yeah. This table is based solely on a visibility analysis.  
18 So in this case, for the VIA column I'm trying to replicate  
19 their assumptions. I'm assuming when LandWorks made their  
20 final determination it was based on the visibility analysis  
21 and fieldwork. And in this table -- I don't have the  
22 benefit of fieldwork. I wouldn't have reported the  
23 fieldwork, anyway, it's really related to just the -- the  
24 visibility analysis.

25 But, say, take the -- the bottom row, the West Musquash

1 Lake where I'm saying there's one turbine visible,  
2 somewhere on the lake within the 8-mile distance there's at  
3 least one cell where there can be one turbine visible. And  
4 it's -- it's actually not likely that that's true because  
5 the height that I'm using for vegetation is 45 feet and the  
6 vegetation along the shoreline is higher than that. So it  
7 makes sense to me that LandWorks didn't find any visibility  
8 at all.

9 I would be more concerned if I would have found one of  
10 these lakes with a dozen -- or a large part of the lake  
11 looked like it was going to be visible. Then what would  
12 have happened is I would have gone back and asked. And  
13 that -- that actually has happened in previous projects  
14 where we found errors.

15 Q Okay. Thank you. On Page 30 of your report, the second  
16 paragraph ends with a statement: The guidance to evaluate  
17 state or national significant scenic resources with  
18 potential views of the turbine tip, as indicated by the  
19 topographic visibility analysis, is reasonable and should  
20 be adopted by others.

21 Are you suggesting that the Commission should take the  
22 worst case scenario in terms of potential visibility and  
23 assume there's no vegetation, that we just simply look at  
24 topography.

25 A No. I think -- I think -- what I'm saying here is there's

1 a procedure the that Maine Historic Preservation Commission  
2 is using, which I think originally was posed in Kibby, but  
3 I've since checked on and they are doing it. There could  
4 be, for instance, a dozen historic sites that are north of  
5 this project and we just know they're not going to see  
6 anything because of their location.

7 It seems an unnecessary expense to make them go do site  
8 evaluations for all of these sites when we -- when we're  
9 very confident that because of topography those sites will  
10 never have visibility. And that's what I'm saying here,  
11 that if a state or nationally significant scenic resource  
12 will not be able to see the tip of an upraised blade  
13 because of topography -- not vegetation, just topography is  
14 going to block it, then we really don't need to do other  
15 assessments, that that's a pretty simple geometric  
16 evaluation and the data -- there's always the potential for  
17 data error, but the data are pretty reliable for that kind  
18 of analysis.

19 Q Okay. Thank you. One last question. You present an  
20 intriguing idea on Page 27 in terms of post-construction  
21 monitoring. Have you given any thought to how we would do  
22 that for scenic impact? Or maybe another way to put it is,  
23 do you know of that being done in other -- in other areas?

24 A The only study that I know of that made a real attempt to  
25 use a probability sample for that was done for Searsburg.

1           So there was a survey done before the -- the Searsburg  
2           project in Vermont to determine the public's reaction and  
3           then a survey done after -- shortly after the project went  
4           into operation to see whether or not the original survey  
5           was accurate, but also to get an assessment from local  
6           public how the construction went and were there impacts,  
7           for instance, that weren't really being accounted for like  
8           trying to get these blades through a village, which in this  
9           case -- in the Searsburg case was difficult.

10           In that project people thought that the first survey  
11           and the simulations and everything were really quite  
12           accurate and had been fairly done and that the project was  
13           pretty much what they expected it would be. And it would  
14           seem to me useful to at least do that a few more times to  
15           see whether these methods are working. It's not unlike  
16           doing these bird and bat mortality studies, we have no idea  
17           whether the calibration is really working or not.

18    Q       And really, finally, the big question is, do you feel you  
19           could -- you could make a recommendation on whether or not  
20           the scenic impact here is unreasonable?

21    A       Well, the -- part of the issue -- I don't feel that the  
22           scenic impact to any individual lake is unreasonable. I  
23           feel pretty comfortable saying that, understanding that the  
24           definition of -- there is no definition of unreasonable  
25           that I've been able to find anywhere in court cases or

1 anything. So I guess that really means the Commission gets  
2 to decide that -- that definition. The only difficulty  
3 that I have is, there's a bunch of lakes here. And I think  
4 I criticized the LandWorks' synthesis procedure, which was  
5 a simple averaging, just because it -- if you have a couple  
6 lakes where there's no impact but you've got a dozen lakes  
7 where it's really pretty bad, then when you average them,  
8 it's not going to reach the level of the -- averaging  
9 always will bring the value down.

10 But my, God, oh, ten lakes, a dozen lakes, that's a lot  
11 of lakes. And we're starting towards that number in this  
12 case. We've got a bunch of lakes that are going to get  
13 impacted. That's a different kind of cumulative impact --  
14 or it is a cumulative impact. I don't know how to -- how  
15 to weigh that. The way that the Wind Act is set up, every  
16 significant scenic resource is evaluated separately and  
17 there's no guidance on how you do that synthesis.

18 And, I mean, as you know, you're going to talk about  
19 cumulative impacts later probably in a different way, but  
20 that's not something for which there's a lot of procedures  
21 in this country anywhere, let alone for wind turbine  
22 projects. So that's a tough one. I don't have a simple  
23 answer or a good answer to that. But if we did do  
24 follow-up studies, that would be one of things to find out  
25 about.

1           And part of the way to look at it might be the extent  
2 of exposure, duration. So in these particular lakes, as I  
3 understand the opposition's argument, is that they're  
4 special because they're linked and that you could get on a  
5 three-day trip and, you know, be going through Junior and  
6 Scraggly Lake and Pug Lake -- the new Pug Lake and, you  
7 know, be exposed to it for several days, like, all day  
8 long. That's not as bad -- or that's much worse than the  
9 Appalachian Trail argument.

10           The Appalachian Trail is just saying that, you know,  
11 we're going to get three or four minutes' exposure every  
12 hour. And they're, you know, kind of throwing up their  
13 hands and did throw up their hands in Redington and that  
14 project was turned down. Well, now we've got one where  
15 there's the -- some potential where there's much longer  
16 exposure. And I just don't have -- I don't have enough  
17 knowledge about use and exposure to be able to evaluate  
18 that, we don't have that information. That's the issue,  
19 though.

20           MR. LAVERTY: Fred, if I might.

21                                   EXAMINATION OF JIM PALMER

22 BY MR. LAVERTY:

23 Q       Jim, this is a question that obviously we need to -- that  
24 Amy needs to address and we need to mull over. But you --  
25 you have spent some time with the statute in attempts to

1 interpret, you know, the terms of art in a -- in a way that  
2 allows you to do your job.

3 I just ask you for your opinion, a lay opinion. Do you  
4 think that we have the statutory authority under the Wind  
5 Power Act to look at cumulative impact -- cumulative visual  
6 impact?

7 A Well, I certainly think that you have the statutory  
8 authority within an 8-mile study area to consider  
9 cumulative impact the way that I was just talking about it  
10 for these linked lakes or, for that matter, in Highland  
11 along the Appalachian Trail there's several places, not  
12 just Bigelow where it's going to be visible. So within a  
13 project you absolutely do. And there may be ways, you  
14 know, to, well, stretch it to make it among projects.

15 Q I don't want to get into this now because we need to talk  
16 -- we don't have time. One side of this whole discussion  
17 about cumulative impacts is that the Legislature has  
18 already weighed in and said that there are expedited areas  
19 for wind energy and there are nonexpedited areas. These  
20 expedited areas have addressed this issue because they  
21 provide a different standard for evaluation. The Redington  
22 project, this was before the Act, and it now is in a  
23 nonexpedited area should a project come forward again, so  
24 there's a different standard being applied.

25 Some people have argued -- or a very legitimate

1 position is that the Legislature, when they said, these are  
2 expedited areas, they said, this is where wind power will  
3 take place and has said that we're going to look at issues  
4 of cumulative impact in nonexpedited areas and that we're  
5 going to accept sort of clustering in expedited areas. And  
6 so that's the way we're going to address this, we're going  
7 to have areas where there aren't going to be assessments of  
8 this type and there are going to be areas where there are  
9 going to be assessments of this type. Do you have any  
10 comments on that?

11 A I mean, that wasn't my understanding. My understanding was  
12 that expedited areas were identified because they're not  
13 close to a couple extremely sensitive receptors like  
14 national parks or, I don't know, some city centers. I  
15 don't know what the thing said they were. But I don't  
16 remember them talking at all about things like clustering  
17 or -- I think that that's stuff that we brought into the  
18 discussion later on the notion that that -- and that's what  
19 we're going to talk about later.

20 Q We'll talk about later. I apologize --

21 A That's okay.

22 Q -- for leading into that.

23 A I think that this cumulative impact, that is, many lakes  
24 all within the study area which one could assume users may  
25 travel from one to the other to the other, I think that



1           that's within your purview. I just don't have a way --  
2           given the data, I don't have a way to assess that and I  
3           don't have the data to assess that. It's two parts.  
4           That's really different than project to project to project  
5           as you're walking the Appalachian Trail.

6           That's a different kind of cumulative impact, which is  
7           also serious, or the notion that the Appalachian Mountain  
8           Club study, I guess that's who it was, did the study of  
9           what the impact of fulfilling the State's wind energy goal  
10          would be, you know, as sort of painting a patina of wind  
11          turbines across the whole state, what's that impact going  
12          to be like.

13          MR. LAVERTY: Thank you.

14          MS. HILTON: We're out of time if we're following our  
15          schedule here. Fred just -- but I do want to mention  
16          something that we haven't talked about that has come up and  
17          that has been the issue of night lighting. We can either  
18          take that up now realizing that we're running over on time  
19          or we can allow -- listen to what the applicant and some of  
20          the intervenors are going to be asking questions of the  
21          various State agencies and it may come up as a part of that  
22          discussion. There's no reason why the Commission at any  
23          point in time can't ask questions.

24          So would you -- do you want to move along or would you  
25          like to address the lighting issues right now?

1 MR. LAVERTY: The thing about the lighting issue is  
2 that I thought we already pretty much addressed them? I  
3 mean, I think -- you know, Toby's questioning, the dialogue  
4 we had the applicant at the -- Tuesday morning's portion of  
5 the hearing. You know, I think that we collectively could  
6 see coming perhaps a condition to the permit talking about,  
7 you know, as technology improves that the project be  
8 reconsidered in that light given technical fees -- I mean,  
9 all the important boilerplate language. But I think that  
10 -- I mean, if we need to go into that any further --.

11 MS. HILTON: Okay. Good point. I don't know, Fred,  
12 any of the commissioners want to -- Rebecca?

13 EXAMINATION OF JIM PALMER

14 BY MS. KURTZ:

15 Q I guess I wanted to just add, I guess it was Ed's question  
16 that said -- that asked unreasonable impact and you said  
17 not for any individual lake there may not be an  
18 unreasonable impact, but for the collective there might be,  
19 or you expressed some reservation. Did you take into  
20 account night lighting on that when you -- the assessment  
21 that you just gave us?

22 A No. No, I didn't -- I didn't. Part of the problem there  
23 is that I don't have any knowledge of night use of these  
24 lakes. A resident that -- or the gazebo where we were  
25 looking at -- I mean, you weren't, but at Lincoln, isn't

1 from a significant scenic resource. So the way that the  
2 Act is written, you know, residents aren't protected under  
3 the Wind Energy Act, it would be somebody on the lake using  
4 the lake. And I don't have any knowledge of that being a  
5 significant thing. But I did not -- I mean, the direct  
6 answer is, no.

7 Q Unfortunately, I wasn't at the hearing on Tuesday so I --  
8 but I'm looking forward to the -- or the -- the auditory  
9 record has been made available to me and I'm waiting for  
10 the transcription, but --. And I don't know that you're  
11 comfortable answering this, but based on what you saw on, I  
12 guess it was Monday night, do you believe that your  
13 assessment that you have just given would change if you  
14 knew more about night use?

15 A Yeah, if, for instance, there was a State campground with  
16 the view that we had from Lincoln, that would be probably  
17 an unreasonable impact, I think. And that would be for two  
18 reasons. One is because it's a pretty strong impact, but  
19 also because there's a number of -- you know, more than  
20 just a very occasional person being exposed to it.

21 Part of the difficulty in this case -- it's not that  
22 there aren't campsites, there are campsites scattered  
23 throughout this area, but it appears to be a very small  
24 number irregularly used and there's no firm data that would  
25 suggest that it's anything other than that so far. If I

1 had such data, then my opinion might change and I might  
2 push harder for mitigation.

3 I mean, it's my understanding that there -- that these  
4 are pretty standard lights and there are other lights that  
5 have cutoffs and things like that that may or may not work  
6 in the wind turbine situation, but conceptually would help  
7 mitigate this situation.

8 EXAMINATION OF JIM PALMER

9 BY MS. HILTON:

10 Q I have one last question and I think it's pretty quick. Is  
11 there -- you mentioned the -- that one of the unique things  
12 about these lakes is that they -- they are connected and --  
13 which is -- sort of introduces a little bit of complexity  
14 to how we look at scenic resources. And I may have missed  
15 something here, but is there anywhere that you have seen  
16 where there is actually a map -- you know, the AT is a very  
17 well established trail.

18 A That's right.

19 Q And we've heard in testimony that these lakes are used for  
20 canoe trips -- multi-day canoe trips. Have you ever seen  
21 anything, you know, advertising or showing a map of this  
22 canoe trail, if you will?

23 A It's not set up like a trail. And I think that, actually,  
24 we had some testimony from that from the guides that they  
25 sort of -- because of the nature of what guides are, they

1           tailor it to the individual client or two that they take  
2           out and what they're looking for. So it's -- they kind of  
3           customize their trip. I was interested in this, too,  
4           because that's sort of the way that Lawrence presented in  
5           his visual impact assessment. I couldn't find such a map,  
6           but there were blog sites that talked about the general  
7           phenomena.

8           All the lakes aren't connected, but clearly several of  
9           them are and they're all controlled with the same dam and,  
10          I mean, we experienced that, we went through several lakes.

11        Q     Right. Okay.

12        A     So it's not advertised that way, it's not something that an  
13          individual, like I with my kids, would know and just go. I  
14          think it's really accessed primarily by guides so far as I  
15          understand the description.

16          MS. HILTON: Okay. Thank you.

17          MR. LAVERTY: Gwen, if I'm not mistaken -- and this  
18          could be something for the staff to pursue is that NRCM's  
19          testimony during the public session mentioned some -- at  
20          some point these -- these lakes and these trips had been  
21          addressed or noted by some publication and I think there  
22          might have -- I'm not sure what the testimony was, but  
23          there may, in fact, be something like that.

24          MS. HILTON: Yeah. Good point.

25          MR. TODD: There is information in the record submitted

1 by NRCM on, as I recall, two particular canoe trips from  
2 different -- starting from different points amongst these  
3 lakes.

4 MR. PALMER: I think that's the -- maybe the Maine Flat  
5 Water Canoe Guide or something like that. But I don't see  
6 anything that's sort of separate like the -- the watershed.  
7 I mean, this has been presented as though this is a unit  
8 and -- and that's how the Lawrence VIA presented it. And  
9 I'm not able to find anything that would suggest that  
10 that's -- that that kind of advertising and marketing is  
11 actually occurring. That doesn't mean it doesn't -- that  
12 the opportunity doesn't exist, I'm just not seeing it.

13 MS. HILTON: Okay. I think that's clear. Any more  
14 questions for Jim? Okay. So how do we --? Okay. I guess  
15 would the applicant like to do their cross-examination now  
16 and who would you like to cross-examine?

17 MS. BROWNE: I think what I would like to do is start  
18 with Dr. Palmer. We have 45 minutes for cross and what I  
19 would like to do is take 25 minutes now, if I could, and  
20 then reserve 20 minutes for recross at the end after the  
21 other parties have gone.

22 And I think I will, in the interest of time, probably  
23 just question Dr. Palmer and potentially I F & W depending  
24 on what issues come up when they're questioned by the other  
25 parties.

1 MS. HILTON: Okay. That sounds fine.

2 EXAMINATION OF JIM PALMER

3 BY MS. BROWNE:

4 Q So good morning, Dr. Palmer.

5 A Good morning.

6 Q I appreciate the thoughtfulness of your review and your  
7 comments in both the hearing last week and prior hearings.  
8 It's been a little bit of an evolving process through these  
9 projects.

10 I want to touch on just a few basic points because they  
11 may come up in your cross from the intervenors. And some  
12 of these are just technical issues. I think in your report  
13 -- and I assume you would agree -- that the visual  
14 simulations that were done by LandWorks are generally  
15 accurate, well constructed visual simulations that provide  
16 a good sense of what the project will look like when built?

17 A Yes, I would agree with that.

18 Q And you think they followed best professional practices in  
19 preparing those simulations?

20 A Yes, I do.

21 Q And I think you also stated in your report that although  
22 there are some differences of opinion on specific matters,  
23 that LandWorks' evaluation has led to an evolution in your  
24 thinking about how to apply the criterion under the Wind  
25 Energy Act?

1 A Yes, that's accurate. I'm comfortable with that statement.

2 Q And I assume that you would agree that the report as  
3 prepared overall, not just the visual simulations, but in  
4 accordance with professional standards and provides a  
5 comprehensive body of information for the Commission and  
6 others to rely on for decision-making?

7 A Yeah, that -- my only hesitancy has to do with the survey  
8 and the opportunity of using the survey is to gather data  
9 about use and things like that, but LandWorks wasn't really  
10 involved centrally in that. But, yes, I think that it was  
11 a professionally done -- well done report.

12 Q Okay. And then I want to talk a little bit about  
13 visibility. Go ahead.

14 A No, good.

15 Q Because this came up in -- in the table of visibility that  
16 you had that compared your assessment and LandWorks'  
17 assessment and this also came up on the West Musquash Lake.  
18 But as I understand it, you think it would be erroneous to  
19 include visibility of turbines that are greater than 8  
20 miles away from the scenic resource, right?

21 A As I understand the Wind Energy Act law, the Commission  
22 must consider turbines that are further than 8 miles away  
23 as insignificant. And if there isn't a way for them to  
24 separate out those turbines from turbines that are within 8  
25 miles, then it's very difficult for the Commission to do



1           what it's legally been asked to do. So the way I would  
2           suggest doing that is, in the visibility analysis you just  
3           separate, you don't include. Yes, that would be the  
4           simplest way. I could think of other ways, but --.

5    Q       So it's -- it's possible that your viewshed map might show  
6           a potential visibility, but then your analysis of  
7           visibility would show no visibility because those turbines  
8           are more than 8 miles away?

9    A       That would be one reason or because you went into the field  
10           and you found out that the trees are higher than you  
11           modeled them and so they're screening, right.

12   Q       And I think you had some assumptions about vegetation  
13           height and this came up in the prior Bull Hill proceeding.  
14           And I think you -- you use a default of 40 foot for  
15           vegetation height in this area, right?

16   A       Yep.

17   Q       And LandWorks used a different height, right?

18   A       Yeah, 5 feet higher.

19   Q       But --

20   A       But different, yeah.

21   Q       But based on fieldwork, which should inform the -- the  
22           vegetation height you use in the VIA, right?

23   A       Correct. Well, I don't know that fieldwork should inform  
24           that, but it should at least validate that you're modeling  
25           vegetation height is not higher than the actual height.

1 But, yes, fieldwork would suggest that both 45 and 40 are  
2 below the typical tree height.

3 Q So the VIA would be conservative in terms of its  
4 assumptions about visibility?

5 A For the -- yes, it would. The only exception to that would  
6 be that the VIA gave a 45-foot height to a scrub shrub land  
7 class, which won't -- won't be that high. But the  
8 practical impact to that is very, very low because there  
9 isn't very much of that area.

10 Q And I think if you compare your table of visibility to  
11 theirs, the differences are insignificant, right?

12 A Well, they're very small. And, actually, they're  
13 insignificant because they don't really affect the  
14 significant scenic resources.

15 Q Right. And then I think you've also said in prior  
16 proceedings, but also in your June 3rd report, that if you  
17 have visibility of just turbine blades as opposed to the  
18 hub, that they oftentimes are not noticeable and they will  
19 never be visually dominant; is that correct?

20 A Well, there's certainly never -- a blade will never be  
21 visually dominant if it's seen, you know, from several  
22 miles. The -- you may be able to optically resolve a small  
23 portion of a blade tip, but whether you could recognize it  
24 as part of a turbine from the distance of several miles --  
25 I mean, you may not be able to tell that. Yeah, you have

1 to see a larger portion to be able to know that -- what it  
2 is you're looking at. Yep. So a hub -- from an impact  
3 point of view, a hub -- the center of the hub is a better  
4 -- more important.

5 Q It has a greater potential impact on visibility?

6 A Yeah, because if you can see the hub, people will really  
7 recognize the turbine as a turbine.

8 Q One of the early potential concerns you identified was the  
9 potential for the turbines to loom over the viewer. And  
10 then you went on your -- and that concern was articulated  
11 before your site visit, right?

12 A Maybe. I'm not absolutely sure of that. But it's  
13 certainly -- in other contexts it's something that -- that  
14 I've thought about and written about in reviews, so  
15 possibly, yes.

16 Q And then when you went on your field visit, you  
17 specifically looked at the potential for turbines to have  
18 this sense of looming over the observer, right?

19 A Right. And we talked about that as a boat, as a group of  
20 four, trying to understand when that feeling would occur  
21 for those of us that were in the boat, correct.

22 Q And as I understand it -- and elaborate if I'm off on this,  
23 but as I understand it, where you have, you know, large  
24 bodies of water as you do here, the potential for looming  
25 is reduced?

1 A Well, I think that that would be only because you're  
2 further away from the turbines. It's that distance, I  
3 think, that's -- that's really the factor. In some ways  
4 it's increased just because it's an open area and,  
5 therefore, the visibility of turbines is going to be  
6 greater, but the sense of looming starts to occur as you  
7 move toward turbines or any big object.

8 For some time they're sensed as something over there.  
9 And at some point you sort of get a feeling that you're  
10 getting under them, that they're over you. That's the  
11 threshold of where they start to feel looming over you.  
12 They're no longer out there, they're above you, they have a  
13 different kind of presence.

14 So conceptually it would be possible, it's just that I  
15 don't think that we're close enough on any of these lakes  
16 to be past that threshold.

17 Q Okay. So it wasn't an issue for this particular project  
18 with visibility on these lakes, right?

19 A Yeah, that's correct.

20 Q And then, as I understand it, from your evaluation matrix  
21 there are, basically, three lakes that have the potential  
22 greatest scenic impact if you look at them individually;  
23 and that's Pleasant Lake, Scraggly Lake and Shaw Lake,  
24 right?

25 A Yep.

1 Q And I think with each of those lakes and, in fact, for each  
2 of the scenic resources of state or national significance  
3 within the study area, you concluded that the impact of  
4 visibility on use and enjoyment would be low, right?

5 A Yeah. Yes. And in part that's because it's my  
6 understanding that use is very low on these lakes -- on  
7 these particular lakes.

8 Q Okay. So your -- your understanding is that overall use of  
9 the lakes is low, right?

10 A On these -- on the lakes that -- those particular lakes.  
11 Bottle Lake, for instance, it's high, but the lakes that  
12 we're talking about.

13 Q Well, relatively speaking.

14 A Yes. Right. Yes. Well, I -- yeah.

15 Q But as I understand it, the Wind Energy Act directs us that  
16 visibility alone is not a basis for concluding that there's  
17 an undue adverse impact, right?

18 A Correct.

19 Q And that the standard is what is the impact of visibility  
20 on scenic character and existing uses related to scenic  
21 character, right?

22 A Correct.

23 Q And my understanding from your report is that impact on use  
24 and enjoyment is -- I think you refer to it as a bottom  
25 line criterion for evaluating scenic impact, right?

1 A Certainly one of them, yes.

2 Q Well, because, for example, I think what you said was if --  
3 even if there were significant visibility, if the  
4 visibility wasn't adversely impacting use and enjoyment, we  
5 certainly wouldn't want to conclude that the scenic impact  
6 was unreasonable?

7 A Correct. Yeah.

8 Q So that what we're really trying to get at is what is the  
9 impact of visibility on use and enjoyment of these  
10 resources?

11 A Hm-hmm.

12 Q And that for each of the lakes, including the three with  
13 the greatest visibility, your conclusion was that the  
14 impact on use and enjoyment was low?

15 A Yes, but part of that is because there's very little use.  
16 But, yes, that is my conclusion. Right.

17 Q Well -- and part of it is also because of the nature of the  
18 use. For example --

19 A Yes.

20 Q -- fishing is -- is probably the most significant use?

21 A Yeah, that's my understanding.

22 Q And I think that you've testified previously and perhaps  
23 written that in general there may be a lesser expectation  
24 of scenic quality for fishing as opposed to, for example,  
25 paddling or canoeing or a greater acceptability of turbines

1 or other --

2 A It's not the reason -- it's not a primary reason why people  
3 go fishing. People go fishing for other reasons and their  
4 focus is closer in, it's not on distant mountains, yeah.  
5 That's been my experience, right.

6 Q And then I think you were -- obviously, heard the testimony  
7 and I think have read the testimony of both the owner of  
8 Maine Wilderness Camps on Pleasant Lake, Cathy Whitney?

9 A Yes.

10 Q And you understand that her view was that for users of  
11 Pleasant Lake the visibility of turbines would not  
12 adversely impact their use and enjoyment?

13 A I -- yeah, I heard her testify to that. I don't know  
14 whether that's accurate or not, but that's what she  
15 believes.

16 Q And she certainly has experience on that lake and has some  
17 basis for drawing conclusions, wouldn't you think?

18 A Well, she has experience on the lake and basis, but I heard  
19 from guides who said that it's going to completely destroy  
20 their livelihood, too, and they -- they have a similar  
21 experience and basis to her. I'd really rather do a  
22 probability sample and find out what people's experience is  
23 like.

24 Q Well, that's a good question. And, I mean, it leads me to  
25 another line of questioning. And I appreciate your desire

1 for empirical data. And I guess what I want to sort of  
2 focus on -- and you've advocated for intercept surveys with  
3 the use of photo simulations and -- to determine actual  
4 users' expectations, right?

5 A Yep.

6 Q But you agree that's not a requirement of the Wind Energy  
7 Act? There are other ways to get to the question of impact  
8 on use and enjoyment other than through the use of  
9 intercept surveys?

10 A I won't deny that there's that possibility. Intercept  
11 surveys are one way to do that, but there may be other  
12 ways, correct.

13 Q And did you have a chance to look at all the material that  
14 LandWorks relied on when they came to their conclusions  
15 about impact on use and enjoyment?

16 A Well, I certainly read through that part of VIA and I'm  
17 familiar with some of the material and I've written some of  
18 that material, so, yeah.

19 Q And if includes, for example, the phone survey done by  
20 Portland Research Group, the snowmobile survey done by  
21 Portland Research Group, a review of State publications,  
22 formal, informal interviews with people in the area?

23 So you'd agree that although there weren't intercept  
24 surveys with photo simulations on the lake, as you would  
25 have in an ideal world prefer, that there was a substantial



1 body of information on which they did rely?

2 A But I -- I'm not very confident in the applicability of a  
3 lot of that information. For instance, it's pretty clear  
4 that there's a lot of support for renewable energy  
5 generation in northeastern states, I don't disagree with  
6 that. It's pretty clear there's also a huge NIMBY  
7 phenomenon -- what's called the NIMBY phenomenon that as  
8 soon as it affects me, I'm against it, even though the week  
9 before I knew that it was going to be in my back yard I was  
10 for it.

11 So I don't know what the value of a general survey like  
12 that is worth or the telephone survey. I mean, yeah, all  
13 of these people -- or most of the people that answered the  
14 telephone survey claimed that they had seen wind turbines  
15 somewhere, but it's not clear that they're anything like  
16 the wind turbines that are going to be here or that they're  
17 -- that they're the same distance or that they were seen  
18 from a lake, which may be important or I --. I mean,  
19 there's just so many problematic variables.

20 So I think that the easiest most direct way -- I'd  
21 rather have, you know, 12, 20 responses of people that are  
22 really on one of these lakes for specific turbines than a  
23 large survey of New England users saying that they support  
24 wind energy, which isn't very relevant.

25 Q Well, you read the Baskahegan study, right?

1 A I did. That -- and I like that and it's a strong study.  
2 It falls to the same critique that I had of the snowmobile  
3 study, that is, if people are going to react as we've heard  
4 from a couple of guides that, you know, they've taken  
5 clients out and they're never going to return again because  
6 they're so upset, those people will not be on the lake,  
7 right, because there's wind turbines there now. So you  
8 miss those people.

9 Nonetheless, you know, 48 respondents, none of whom  
10 when asked, you know, what management problems are there  
11 say anything about wind turbines. Instead they talk about  
12 things like liter. You know, I'd say that that was a  
13 pretty powerful finding, yeah.

14 Q I want to talk for a minute about --

15 A I might also add that from that study we can estimate  
16 something about what the usage on those lakes are, which is  
17 very helpful.

18 Q It's probably the closest thing we have to a -- certainly  
19 in Maine a post-construction study of visibility of  
20 turbines?

21 A Yeah. I mean, it would have been nice if we could have  
22 asked about -- specific about turbine questions and I  
23 understand it wasn't part of the design. But I do agree  
24 with the authors of that study that not having anyone  
25 mention those turbines is significant.

1           The particular boat launch that's on Baskahegan Lake  
2           was beyond 8 miles, so in part that sort of suggests that  
3           the 8-mile zone might be a really well chosen zone.  
4           There's two other boat launches where they questioned  
5           people and they actually weren't on Baskahegan Lake, they  
6           were part of that lake system. And I don't know the  
7           relative numbers, you know, how people were divided among  
8           those three boat launches. But that shouldn't -- the way  
9           the study gets titled and referred to gets that all  
10          confounded, but it was a good study.

11        Q     Right. And there -- okay. So in the interest of time I'll  
12          move on. There was a discussion about sort of clustering  
13          and -- and wind turbine sprawl. And this gets to your  
14          question about even though your conclusion that there's no  
15          undue adverse impacts on any individual lake, you don't  
16          know how to address the cumulative experience of moving  
17          through the lakes. You agree that sort of reducing -- that  
18          there is a scenic benefit to locating turbine wind power  
19          projects in proximity to other wind power projects and  
20          reducing what we sometimes refer to as wind turbine sprawl,  
21          right?

22        A     Yes. It's both for the turbines and the infrastructure.

23        Q     So there's a benefit to locating this project in this area,  
24          which is approximate to the Stetson 1 and Stetson 2  
25          projects?

1 A Right.

2 Q And that that has a -- a net positive scenic benefit as  
3 opposed to locating it in a more remote area of  
4 jurisdiction that may also be home to many scenic lakes?

5 A Yes.

6 Q I've been told I don't have much time left. Just bear with  
7 me for one minute.

8 On this question of going through the lakes, do you  
9 recall the testimony last week that the AMC Quiet Waters  
10 guide identifies 25 canoe trips in this greater region?

11 A Yes.

12 Q And that only two of those trips go through any portion of  
13 the study area?

14 A Yes, I do remember that.

15 Q So that would be an indication that, in fact, the  
16 publicized multi-lake trips are not predominantly within  
17 the study area, right?

18 A The publicized ones, yes, that's correct.

19 Q And I didn't bring it with me today, but I had last week --  
20 and I wonder if you're familiar with, the Downeast Lakes  
21 Land Trust Water Trail Guide; is that something you've  
22 seen?

23 A I have not seen that.

24 Q Okay. That also identifies water trail trips, none of  
25 which go within the study area, but we can follow-up with

1 that.

2 I guess I will save any follow-up for later. And  
3 thanks again for your thoughtful comments.

4 A You're welcome.

5 MS. HILTON: Okay. I guess we're looking at  
6 cross-examination by CLF. Did you want --? Okay.

7 EXAMINATION OF JIM PALMER

8 BY MR. MAHONEY:

9 Q Good morning. Shawn Mahoney with the Conservation Law  
10 Foundation. And I have a question and I'm not sure if  
11 you'll be able to help me on it, Dr. Palmer.

12 But in your discussion about empirical data it brought  
13 to mind some empirical data that has been gathered in this  
14 watershed area. So let me premise by asking if you're  
15 familiar with another issue that has arisen in this area  
16 with respect to impacts on guiding and lodges with respect  
17 to alewives returning to the St. Croix area. Are you  
18 familiar with that?

19 A No, I know what alewives are, but I'm not familiar with any  
20 study about them.

21 Q Okay. I guess -- I'm interested just because there was  
22 empirical data that was gathered to show -- that showed  
23 after a study by State agencies that alewives in the  
24 watershed would not compete with other freshwater species.  
25 And that empirical data was gathered over a long period of

1 time.

2 In the face of that empirical data, though, there was  
3 still opposition to introducing alewives to the area. And  
4 so I guess my question really goes to your emphasis on  
5 gathering empirical data -- something like the Baskahegan  
6 study is, I think, a very useful and helpful one, not just  
7 for individual projects, but for the process. Have you had  
8 any experience, though, similar to this one where empirical  
9 data says there's no conflict and yet people are still --  
10 are discounting the empirical data and still saying there's  
11 a conflict and an impact?

12 A Yeah, we're trying to close down a nuclear plant in Vermont  
13 that's like Maine had and -- and got closed down. And we  
14 keep getting told that there's no empirical data to say  
15 that it's safe and a lot of people are upset about it.

16 Q Well, I guess my question really goes to, I mean, even with  
17 empirical data, aren't you still going to have these same  
18 types of more emotional visceral responses regardless of  
19 empirical data, so there's a limit on -- on the empirical  
20 data's usefulness?

21 A Well, it's -- at some point a policy decision needs to be  
22 made. And in some ways the population of Maine has to make  
23 a determination through their representatives or at the  
24 polls or -- or through the Commission or somehow. And a  
25 policy decision includes more than just empirical data.

1 But I -- I think that we could do -- we can do a lot with  
2 empirical data. And scenery assessment is an area where  
3 you can go to town meetings all through New England and  
4 developers will get up and say, well, I think it's  
5 beautiful and beauty is in the eye of the beholder and it's  
6 different than everybody. And, in fact, that isn't true.

7 Beauty is in the eye of the beholder and, what you do  
8 know, most people agree incredibly in -- in that impact in  
9 this particular area, social science is more reliable than  
10 the science of forestry. And we make all kinds of  
11 decisions in forestry about whether to cut down trees or  
12 not. But why shouldn't we rely on the social science to  
13 make those decisions, too? Anyway, yeah, I'm going on.  
14 Sorry.

15 MR. MAHONEY: Okay. No. Thank you. I appreciate it.  
16 That's all. Thank you.

17 MS. HILTON: Thank you very much. All right. I think  
18 we're ready for Corrigan.

19 MR. MAHONEY: I'm sorry, Chairman Hilton, I may have a  
20 -- one or two other questions for the agencies, I just  
21 wanted to reserve that in case I do. Thanks.

22 MS. HILTON: All right. Sure.

23 MR. CORRIGAN: Dave Corrigan, Fletcher Mountain  
24 Outfitter and RealWindInfoForMe.com. I've got a lot of  
25 questions for I F & W, but since Mr. Palmer is here, I

1 think we'll just start with him.

2

3

EXAMINATION OF JIM PALMER

4 BY MR. CORRIGAN:

5 Q At the June 28th hearing you recall you and I had a rather  
6 lively debate concerning the remarks in my testimony where  
7 I said that for anyone to suggest that scenic impacts to  
8 some of these places cannot be considered unreasonably  
9 adverse simply because they see fewer users is to overlook  
10 the entire reason that people come to Maine in the first  
11 place. Do you remember that conversation?

12 A I do.

13 Q Okay. At that time it appeared to me your contention was  
14 that the Expedited Wind Law required that the Commission --  
15 required the Commission to consider the number of users  
16 affected, though you seemed to be at something of a loss as  
17 to exactly what number of users that had to be before the  
18 impact was considered unreasonable. Does that sound  
19 correct?

20 A The Wind Energy Act does not say how many users, it just  
21 says that the number of users needs to be considered,  
22 that's correct.

23 Q Okay. I've read Title 35-A, Chapter 34-A, the Wind Energy  
24 Act. And I find criteria such as, the primary siting  
25 authority shall consider the existing uses of the



1 surrounding area and the expectations of the typical  
2 viewer. I find nothing that says that we have to have some  
3 exceptionally high number of users before we consider the  
4 impact unreasonably adverse. It seems we have ample  
5 testimony in the record speaking to the existing uses of  
6 the surrounding area and the expectations of the typical  
7 user. So can you explain your position that the decision  
8 somehow hinges on a certain undefined large number of  
9 users?

10 A The extent, duration and -- the extent, nature and duration  
11 of potentially affected public uses, in that phrase, which  
12 is evaluation Criteria E, I'm assuming extent has to do  
13 with number.

14 Q Okay. So that's an assumption. Could that not be assumed  
15 just as much it could be the extent of one individual user?

16 A I'm not sure what extent of an individual user means. That  
17 sounds like duration to me.

18 Q Okay. So what we're saying is there's an interpretation of  
19 law here that you and I are not clear on that, perhaps, is  
20 for the Commission to -- to deliberate more on?

21 A Well, certainly the Commission is the ultimate arbitrator  
22 --

23 Q All right.

24 A -- with this access --

25 Q Thank you. You testified just a little while ago that you

1 believe fishermen have lower visual expectations than other  
2 users; is that correct?

3 A And -- I mean, more to the point is that people engaged in  
4 fishing activity tend to have a lower sensitivity to  
5 scenery issues compared to, say, people that are hiking.

6 Q That's your opinion, okay.

7 A No, it's not an opinion, it's a research --

8 Q Okay. Are you a professional fishing guide, Mr. Palmer?

9 A No, I'm not a professional fishing guide.

10 Q Have you dealt with thousands of fishermen on these or  
11 other similar lakes?

12 A No, I can't say that I've dealt with them, but I've  
13 certainly surveyed hundreds.

14 Q Okay. Perhaps -- would you agree that perhaps the  
15 full-time professional guides who have already testified  
16 might have a better understanding of the visual  
17 expectations of the typical fishermen on these lakes than  
18 you do?

19 A No, I wouldn't agree with that.

20 Q You would not agree with that?

21 A I would not agree with that.

22 Q Okay. And just one final question. It is it true that  
23 you're not a legal expert and you're not retained to  
24 interpret the law or to provide legal advice to the  
25 commissioners; is that correct?

1 A I'm certainly not a legal expert, that's correct. I am  
2 hired by the Commission to, I think, interpret the Wind  
3 Energy Act as it applies to the scenery issues.

4 Q To actually interpret the law or to provide technical  
5 assistance for their interpretation?

6 A It seems to me that I have been asked to interpret what  
7 that means within the context of the scenery.

8 Q So you believe that in this case you are being asked to  
9 interpret the law?

10 A I think that that's how it began, that's correct.

11 MR. CORRIGAN: Okay. I thank you for your time and I'd  
12 like to move on to I F & W, if we could.

13 MS. HILTON: Okay. Hold on just a moment. Okay. That  
14 sounds fine. I guess, Jim, you can -- are there any more  
15 questions for Jim? And I'm just asking possibly I guess as  
16 follow-up on the part of the applicant, right?

17 MS. BROWNE: If possible -- I would like to see how  
18 much time I need for I F & W. So is it possible to have  
19 the intervenor complete their --?

20 MS. HILTON: Okay. Sounds like a good idea. Why don't  
21 -- Jim, you can just stay there and we'll bring I F & W up.  
22 Do you want both of the folks --

23 MR. CORRIGAN: Yes, please.

24 MS. HILTON: -- from I F & W? Okay.

25 MR. CORRIGAN: As we don't have U.S. Fish & Wildlife

1 Service, I think it would be good to have both folks from  
2 -- from I F & W.

3

4

5

EXAMINATION OF MARK CARON

6 BY MR. CORRIGAN:

7 Q Hi, guys. Thanks for being here today. I know you've done  
8 a lot of research on these issues. A few questions and you  
9 two can decide who's the best to answer them as we go.

10 Just to lay some basic background, are you aware that  
11 lynx are known to use the area around the proposed Bowers  
12 project site? Is The Department aware of that?

13 A What are you calling the -- I'm Mark Caron of Inland  
14 Fisheries & Wildlife. What are you calling around the  
15 project site?

16 Q Say, south on Route 6 in the general Bowers area.

17 A We have no confirmed sightings in the project area. We  
18 have two confirmed sightings in our lynx database from 2006  
19 in Kossuth and 2009 down by Fifth Machias.

20 Q So it would be fair to say there's evidence in the record  
21 of lynx using the general area?

22 A Yes, historically they've come and gone from this area.  
23 It's certainly understood that it's not a stronghold by any  
24 stretch, but they're capable of traveling great distances,  
25 they will disperse, they will make sallies out of core

1 areas up north, come down to places and -- and possibly  
2 return, possibly not.

3 Q All right. That's very helpful. Thank you. So it is true  
4 that there's designated critical lynx habitat north of this  
5 project area?

6 A According to the Fish & Wildlife Service.

7 Q Okay. And are you aware that the tribal lands immediately  
8 south of the proposed Bowers site are also managed as lynx  
9 habitat by the Passamaquoddies?

10 A I'm not aware of that.

11 Q Okay. Do you have contact with their -- with their tribal  
12 biologists and game wardens, who is where I received this  
13 information from?

14 A Technically, yes, but we don't often discuss issues. I  
15 don't -- I've never talked to them about lynx.

16 Q Okay. So really you haven't done any real studies on that.

17 All right. If we assume that there's critical lynx  
18 habitat north of the site and that the tribal lands  
19 immediately south of the site are being managed as lynx  
20 habitat by the Passamaquoddies, would it be safe to say  
21 that building an industrial energy facility on and around  
22 Bowers, which divides these critical habitats, could  
23 possibly lead to a disruption or even disuse of a critical  
24 travel corridor for these lynx?

25 A No, that's not I F & W's opinion.

1 Q Well, if we have critical habitat on one side of the  
2 project and critical habitat on the other, what would be  
3 your opinion of traveling back and forth? You just said  
4 that the lynx travel great distances in and out of  
5 different habitats. Would it be unreasonable to expect  
6 them to use both habitats with a travel corridor in  
7 between?

8 A I don't -- I don't see where this project would be a  
9 barrier to movements of a terrestrial animal that's capable  
10 of dispersal or routine movements of hundreds of miles.

11 Q Okay.

12 A And there are very few confirmed sightings of lynx,  
13 documentation of the lynx in the area.

14 Q Well, there are very few in the record. Has The Department  
15 ever done any actual studies to find out if they're in the  
16 area?

17 A We surveyed the eastern lowlands biophysical region in --  
18 well, between 2005 and 2007. And we focused our efforts at  
19 the northern edge of the biophysical region. We used --

20 Q Could you tell me where that northern edge would be in  
21 relation to the project?

22 A I'm getting to that. We worked -- well, I could tell you  
23 the towns -- well, I'll just focus through this. What the  
24 strategy was, we took a habitat -- regional habitat model  
25 put together by someone named Chris Hoving from the

1 university that suggested lynx were unlikely to occur in  
2 the eastern lowlands eco region. And historic observations  
3 of lynx in the eco region were also rare. We selected  
4 survey areas by working southward from known observations  
5 of lynx in the adjacent eco regions, so those regions to  
6 the north. As a result, we aggregated survey areas in the  
7 eco region rather than distributing them -- distributing  
8 them throughout the eco region.

9 So what we did was we focused our efforts where we  
10 thought lynx were more likely to occur using a 2002 land  
11 cover map to identify townships with a higher proportion of  
12 conifer forest and regeneration. So -- let's see if I have  
13 a list. The towns surveyed in the region were La Grange,  
14 Hershey Town, T8 R2 WELS, Forks Town area, Woodville,  
15 Lakeview, Sebois, Plantation area, Glenwood, T2 R4 WELS,  
16 Upper Molunkus and Yarmouth, Academy, Grant and T2 R9 NWP.

17 Q Okay. But not Bowers or Kossuth? They were specifically  
18 not --

19 A No. And for the reasons I've already stated, we didn't  
20 feel that there was much there for lynx habitat and we were  
21 more interested in -- in looking adjacent to areas that we  
22 knew there was more habitat and potentially more lynx to  
23 see if they were indeed moving down through.

24 Q All right. I appreciate that. I would move on to a few  
25 bat questions if we could. Is it true that The Department

1 is aware that the northern long-eared bat, the small-footed  
2 bat and the little brown bat are currently being considered  
3 for fast tracking on the federal endangered species list?

4 A That's our understanding.

5 Q Okay. And is it your understanding that these three  
6 species are likely to be listed within the next one to  
7 three years depending on paperwork and when official  
8 projects go through?

9 A I wouldn't say that it's a done deal. It's been identified  
10 and it has to go through a process. And so until it does,  
11 it's just something that's out there for consideration.

12 Q Okay. Are you aware that there are serious concerns within  
13 the scientific community that some of these species could  
14 be extinct within the next 15 years?

15 A That opinion has been made.

16 Q Okay. Knowing that and knowing that I F & W is still  
17 considering allowing the applicant, if approved, to use  
18 mitigation protocols that could still result in bat  
19 mortality, can you tell me just how many bat deaths The  
20 Department would consider acceptable at this -- this  
21 project site?

22 A No, we couldn't.

23 Q You couldn't. Maine I F & W and U.S. Fish & Wildlife  
24 Service seem to be so concerned about mortality in these  
25 species that they're issuing statements to the public to



1 prevent individual bats from being killed in homes, but  
2 you're still saying that some level of mortality seems  
3 acceptable at wind facilities.

4 Is there some explanation as to why it would be okay  
5 for wind developments to kill endangered bats, but not for  
6 homeowners to kill them?

7 A We understand there will be mortality of both birds and  
8 bats associated with wind power projects. What we're  
9 trying to do -- and we do it through our pre-construction  
10 survey efforts and our post-construction efforts -- is get  
11 an understanding about activity, abundance, potential for  
12 fatalities at the project sites.

13 Q So we're talking all after the fact?

14 A Well, before we get some idea of -- and we can only really  
15 get it down to the guild aspect of -- of bat species. But  
16 at present -- I mean, we have limited bat survey work,  
17 which is why we do these pre-construction and  
18 post-construction mortality studies. And the next step  
19 we're doing is this -- this -- what do they call that, the  
20 curtailment effort.

21 Q Okay. I've just got one more question for I F & W. We've  
22 heard a lot from the applicant and the DEP about how this  
23 project will not affect water quality in any significant  
24 way. Since you guys are basically in charge of fisheries,  
25 I'd like to ask you specifically, can you tell me

1           unequivocally that Maine Department of Inland Fisheries &  
2           Wildlife has absolutely no concerns about adverse changes  
3           to either surface or groundwater relating to quality,  
4           quantity or temperature as a result of the Bowers wind  
5           project?

6           MR. TIMPANO: For the record, Steve Timpano. And I  
7           guess our regional fisheries biologist that evaluated the  
8           project application concluded that the findings -- the  
9           proposed construction methodologies, et cetera, and the  
10          findings of the Maine Department of Environmental  
11          Protection -- and you had John Hopeck here this morning --  
12          seemed to cover our concerns for any adverse impacts on  
13          water quality and/or fisheries resources related within the  
14          -- the project area.

15          MR. CORRIGAN: Okay. Thank you very much. And I have  
16          no further questions.

17          MS. HILTON: Okay. Thank you. Just sort of going  
18          backwards a little bit. Shawn CLF, did you want to ask  
19          these folks any questions?

20          MR. MAHONEY: I don't think we have anything at this  
21          point.

22          MS. HILTON: Okay. All right.

23          MR. TODD: Mark, if we could have a copy of the -- the  
24          studies that you referenced on lynx habitat evaluation for  
25          the record?

1 MR. CARON: The eco regional?

2 MR. TODD: Yeah.

3 MR. CARON: Do you want the entire report or just --  
4 the eco regional studies are for all our rare, endangered  
5 and threatened. So we go systematically across the state  
6 to these various eco regions and we do all the work that we  
7 can, we put together a report. So within that report  
8 there's the lynx -- lynx and wolf, actually, were done  
9 together.

10 MR. TODD: I guess the portions dealing lynx in this  
11 approximate area. It doesn't sound like we need the entire  
12 -- it sounds like it's fairly voluminous.

13 MR. CARON: Right. And for the reason I suggested, the  
14 decision was made to just focus on the periphery of known  
15 lynx populations and much better, more consistent  
16 uninterrupted habitat, versus spending time going down  
17 through these other areas where they --. The decision was  
18 made, based on resources available, that we're going to get  
19 the most for our money and -- and focus where we did.

20 MR. TODD: Okay. If I could see the whole thing, then  
21 I can tell you what part of it I would like for the record.

22 MR. CARON: Well, my copy is marked up. If you want a  
23 clean copy, I can --.

24 MR. TODD: It doesn't have to happen today, just before  
25 the -- the end of the record.

1 MS. MILLS: Amy Mills from the AG's office. Just in  
2 particular, the portion that you were reading from today,  
3 that would be helpful. And Fred can follow up with you on  
4 -- to get those portions.

5 MS. HILTON: Okay. I guess, unless we have questions  
6 ourselves, I think the applicant wanted an opportunity to  
7 ask further questions.

8 MS. BROWNE: I would of Dr. Palmer. I don't have any  
9 questions of I F & W.

10 MR. HAMMOND: Gwen, we need to be recognized over here,  
11 I think for --

12 MS. HILTON: A break? All right.

13 (A discussion was held off the record.)

14 MS. HILTON: Okay. We're going to take a ten-minute  
15 and then we'll come back with Jim and the applicant.

16 (Whereupon a recess was held at 11:35 a.m., and the  
17 hearing was resumed at 11:49 a.m. this date.)

18 MS. HILTON: I'd like to pick up where we left off and  
19 -- with the applicant. I guess they're re-crossing on Jim  
20 Palmer, our scenic expert.

21 EXAMINATION OF JIM PALMER

22 BY MS. BROWNE:

23 Q Thank you. I'm not sure this came up in the testimony last  
24 week, but it's reflected in your report and I just wanted  
25 to confirm. Your understanding is that these lakes are

1 managed -- the water levels are managed, right, there's  
2 drawdown of the water levels?

3 A I don't know about drawdown, but the water level is -- is  
4 managed in that several of them are -- the connected ones  
5 have one dam that manages that level, correct.

6 Q So the management of water levels is a piece of evidence  
7 that these resources are used for human needs as opposed to  
8 being in a remote, pristine environment, right?

9 A I would say that it's neither remote, nor pristine,  
10 correct.

11 Q And then getting back to this discussion about  
12 connectivity, the Pleasant Lake and Scraggly Lake and Shaw  
13 Lake and -- I know you know where they are, but for the  
14 benefit of the Commission, Pleasant Lake is there, which we  
15 went to on the site visit from the boat launch, Shaw Lake  
16 is here, Scraggly Lake is here and we went to Scraggly Lake  
17 on the site visit. Those three lakes are not  
18 interconnected, correct?

19 A You can't take a boat from one to the other, correct.

20 Q Right. And then to get from about Bottle Lake to Junior  
21 Lake, as you may recall, on our site visit we took a  
22 relatively circuitous path to get from Bottle to Junior to  
23 avoid hitting rocks, right?

24 A Yes.

25 Q In fact, I don't know about your boat, but our boat hit a

1 rock on the way back.

2 A Yeah.

3 Q And that was in June. And your understanding is that later  
4 in the summer the water levels are even lower in that  
5 passageway, right?

6 A I didn't understand that, but it's not going to be higher.

7 Q Right. So there is some difficulty getting from Bottle to  
8 Junior, particularly when those water levels are lower,  
9 right?

10 A You have to do it carefully and it takes time I think,  
11 yeah.

12 Q And when you talk about the experience, maybe over several  
13 days, of being in these lakes, when you're in -- you're not  
14 always going to be seeing turbines when you're on the  
15 lakes, right?

16 A Well, it depends on what lakes you're on, but certainly if  
17 you -- you come to shore on a northern edge of one of these  
18 lakes, you're going to be under the trees' shadow, so, yes,  
19 that would be true.

20 Q So canoeists and paddlers are going to tend to hug the  
21 shore more than be out in the middle of these lakes, which  
22 often are pretty windy, right?

23 A I would expect that that's the case.

24 Q Did you -- I assume you heard the testimony about the  
25 Borden report last week. Is that anything that you've

1 looked at?

2 A No, I have not seen the Borden report.

3 Q Are you aware that there was a study that was done looking  
4 at the sort of economics of the guiding industry in the  
5 Grand Lake Stream area around the time that they were  
6 looking at some of these conservation options?

7 A I've seen reference to it, but I have not been able to find  
8 the report online, so I'm not -- but, yes, I understand  
9 that such a thing was supposedly done.

10 Q And would it surprise you if the results of that report  
11 indicated that the sort of gentlemen fishing experience was  
12 a declining use in this area?

13 A No, that -- that wouldn't surprise me.

14 Q And when we -- we heard a lot of testimony from the guides  
15 and some of the lodge owners, but you would agree that that  
16 is just -- that they represent the perspective of one  
17 potential user group of these resources, right?

18 A They -- yes, that would be correct.

19 Q And there are snowmobile users that use the resources in  
20 the area, right?

21 A Yes, but I don't know that they're on a state or nationally  
22 scenic resource because those are all on water. But, yeah,  
23 there are snowmobilers that use the area. I'm not  
24 concerned about them, though, unless they go on the lake.

25 Q And oftentimes in the winter they do go on the lakes,

1 right?

2 A So in that case then, yes.

3 Q And, in fact, the snowmobile survey identified a number of  
4 people that were familiar with and actually use these lake  
5 resources in the winter, right?

6 A I don't -- I can't say whether they said that they used the  
7 lake resources. They used the area is what I remember,  
8 but, yes.

9 Q And they were, by and large, not concerned with visibility  
10 of turbines in the viewshed, right?

11 A That's correct. But as -- I mean, as you know, my critique  
12 of that study is this is all interviewing people that are,  
13 basically, recreating under turbines and so that's the  
14 answer I would expect.

15 Q But even in the snowmobile survey if there were aspects  
16 that the users objected to, they would have voiced that.  
17 So, for example, I may go and recreate in an area because I  
18 like to, you know, swim or fish, even though there may be  
19 jet skis using the lake. And if I were interviewed, I  
20 might say, I object to jet skis, but I'm still recreating  
21 in the area. So the simple fact that these snowmobilers  
22 are recreating in the presence of turbines doesn't  
23 necessarily mean that they have no objection to turbines,  
24 that was something that was elicited through an interview,  
25 right?



1 A I mean, in principle I agree with you, but as -- my  
2 understanding is that sort of snowmobile rally, I don't  
3 know -- event was literally was under, onsite with these  
4 turbines. So that's a little different than saying that  
5 somewhere on Pleasant Lake there's a jet ski and I'm  
6 fishing. I wouldn't go fishing on a small lake that had  
7 lots of jet skiers and water skiers on it because it  
8 disturbs the fish and so you -- you know, you don't go  
9 fishing there.

10 Q Well, I think what it says is we have to be careful about  
11 drawing generalized conclusions from any of the sources of  
12 data that are out there, whether it's the snowmobiler  
13 survey or the testimony of the guides, right?

14 A Yes. And, I mean, to support your line a bit more,  
15 designing any survey in the real world there's always  
16 shortcomings. And so we -- yeah, that's an issue.

17 Q And at some level we need to use our experience and  
18 deductive reasoning to draw conclusions from what is  
19 necessarily imperfect information, right?

20 A Well, probably not you and I, but the commissioners are  
21 certainly going to have to do that. That's what they get  
22 paid the big bucks for.

23 Q But that's certainly the nature of the beast, right?

24 A That's correct.

25 Q And in addition to snowmobilers which we've talked about,

1           there are also other user groups that would include ATV  
2           users, right, that come and recreate in the area?

3    A       Again, I don't know if they're on -- ice fishing would be,  
4           for instance, another one, yeah. Yeah, perhaps ATV users.

5    Q       Day users who come and fish for a day and might not use  
6           guides, might not stay at the lodges?

7    A       Correct.

8    Q       Other weekend users who, again, might not stay at the  
9           lodges or use guides, right?

10   A       Correct.

11   Q       And I think the -- the testimony as I heard it from the  
12           guides, was their fear that their customers wouldn't  
13           return; is that a fair characterization of some of that  
14           testimony?

15   A       That's my understanding of what they were saying, that's  
16           correct.

17   Q       And you would agree there are many other options for good  
18           fishing in the area other than the lakes within the study  
19           area?

20   A       I suspect that's true, but I don't have enough experience  
21           to be able to say all that for certain. Yeah, throughout  
22           Maine there's good fishing.

23   Q       Do you think it's fair to say that there's a growing body  
24           of evidence -- and I think this came up in your questioning  
25           maybe in the Bull Hill proceeding, but there's a growing

1 body of evidence that visibility of turbines in the  
2 viewshed is not adversely impacting continued recreational  
3 use of these resources in the way that people may have  
4 feared initially?

5 A I think the growing body of evidence is that people  
6 interviewed onsite don't expect -- that if the turbines are  
7 going to look the way the simulations indicate they're  
8 going to look, they don't expect that it will keep them  
9 from returning and it will have only a very modest  
10 depression on the quality of their experience, but they  
11 recognize a more significant -- a bigger decrease in scenic  
12 quality.

13 So it will affect scenic quality significantly, but  
14 it's not going to affect their experience very much and  
15 it's not going to affect the likelihood that they'll return  
16 at all.

17 Q So that would be good news with respect to the guides,  
18 right?

19 A Except that the guides may be dependent on a type of  
20 customer that is more sensitive. And I -- I mean, in that  
21 respect I've got to agree with Mr. Corrigan, they have more  
22 experience about who their customers are than I do. And I  
23 don't -- I don't have any sense about the relative numbers  
24 of those people compared to all the other types of users  
25 that -- that we've talked about. And I don't have any real

1 knowledge of how much that particular gentleman user, which  
2 is maybe an overcharacterization, but that group whether  
3 it's shrinking rapidly or stagnant or -- or whatever. I  
4 mean, that's all information that it would be nice to know  
5 more about, but we don't.

6 Q Well, there are studies that have been conducted where  
7 projects have been built and that have looked at the impact  
8 of the project on continued recreational use of the area,  
9 right? For example, the -- some of the studies relied on  
10 by LandWorks, the Prince Edward Island study, there was a  
11 Scotland study, the Searsburg study that you're familiar  
12 with.

13 A I mean, those are sort of attitude survey studies, to the  
14 best of my knowledge. Certainly that's what the Searsburg  
15 study was. And, yeah, so there's a little before and after  
16 kind of thing. And to the best of my knowledge, they have  
17 not indicated a collapse of use, for instance. And the  
18 Baskahegan study didn't have a pre-study, but had an after  
19 study and the people that they interviewed were not,  
20 obviously, concerned.

21 Q Well, actually, in the Baskahegan study, the in-depth  
22 interviews that they conducted indicated that there had not  
23 been a drop in use of the resource since the project was  
24 built, right?

25 A Yes, that's correct.

1 Q And, in fact, they commented on continued use by, in fact,  
2 guides among other user groups, right?

3 A Correct.

4 Q So there was not only no indication of a collapse of  
5 recreational use, but there was every indication that the  
6 visibility of the turbines was simply irrelevant to the  
7 continued recreational use of that resource, right?

8 A It was -- irrelevant is exactly -- probably a good  
9 descriptor. It's not -- the turbines are not present in  
10 the study, nobody mentions them at all. So, I mean, you  
11 might ask people and they would say, oh, I'm shocked, but  
12 nobody volunteered any information.

13 Q And do you remember hearing Roger Milliken's testimony last  
14 week?

15 A You'll have to refresh me who he was.

16 Q He testified about standing at the boat launch seeing the  
17 turbines, first thing he would do is count the turbines and  
18 then he would go on fishing or boating or whatever and not  
19 give them a second thought, right? Do you recall that?

20 A Yeah, I do recall that.

21 Q And do you recall he also testified that he -- when he was  
22 -- first learned about the potential project from First  
23 Wind had some of the same fears that have been voiced by  
24 the guides about the impact the project would have on a  
25 resource that was very dear to him. Do you recall that

1 testimony?

2 A Yes, I do recall that.

3 Q And do you recall that his conclusion once the project was  
4 built was that, in fact, his fears were not realized, there  
5 was visibility of the turbines, but it didn't change the  
6 fishing in Baskahegan Lake, right?

7 A Right.

8 Q And it didn't change the other recreational aspects that  
9 were so dear to him, right?

10 A Correct.

11 Q And wasn't that a similar outcome in the Searsburg study,  
12 which was a study that you were the principal author of,  
13 right?

14 A I did the whole study.

15 Q Okay. So if I mischaracterize something, please -- I will  
16 count on you to correct me. But as I understand that,  
17 there have been some local concerns voiced about the  
18 project before it was built, right?

19 A They were very modest, but that's correct.

20 Q And the post-construction surveys indicated that those --  
21 you know, that those concerns hadn't been realized?

22 A That's correct. I would also add that the simulations,  
23 which were not as high quality as were given in this study,  
24 were judged to be very adequate to have made that  
25 assessment, people thought the simulations were accurate

1 and helpful, all black and white, by the way.

2 Q So do you think it's fair to say there is a growing body of  
3 evidence that visibility of turbines oftentimes has less of  
4 an impact on recreational users of these resources than we  
5 might fear, looking specifically at the Baskahegan and  
6 Searsburg studies?

7 A Well, the Searsburg study really wasn't oriented towards  
8 recreation use. But from everything that we've seen so far  
9 -- and mostly it's the intercept -- the best evidence that  
10 we have is the intercept studies that have been done -- the  
11 five intercept studies that have been done this past  
12 year -- that's a fair statement -- that's an accurate  
13 statement, it's more than fair. Yeah, I would -- the  
14 anticipation of people onsite is it's not going to  
15 significantly affect their use.

16 MR. HAMMOND: Could I interrupt just for a second? Do  
17 any of these studies that we're referring to involve the  
18 impact of night lights?

19 MR. PALMER: No.

20 MR. HAMMOND: And on your studies that you're referring  
21 to?

22 MS. BROWNE: Not -- I don't believe so.

23 MR. HAMMOND: So this whole conversation is regarding  
24 daytime observation and usage, which is half the time?

25 MR. PALMER: Well, it's when the most use -- recreation

1 use occurs.

2 MR. HAMMOND: Unless you happen to be a stargazer,  
3 right?

4 MR. PALMER: Well -- or don't sleep during the night.  
5 But, yeah, I get your point. And, no, I'm not aware of any  
6 study that has investigated the night lighting issue at  
7 all.

8 MR. HAMMOND: I just wanted to highlight there is  
9 another area.

10 MR. PALMER: Yeah. I'm also not aware of any night  
11 lighting studies on com towers, you know, and how that  
12 might affect use.

13 BY MS. BROWNE:

14 Q Just a follow-up on that, the Baskahegan -- actually,  
15 there's a fair amount of camping on Baskahegan Lake, right?

16 A That's my understanding.

17 Q Okay. And then also on the question about stargazing,  
18 isn't it your understanding that the nature of the turbine  
19 lighting doesn't affect the night viewing of the stars? In  
20 other words, it doesn't affect the night sky in terms of  
21 ability to -- you know, in the same way that building  
22 lights and other sources?

23 A Right, it doesn't give that -- that kind of glow that you  
24 get from a city area that -- yes, that's -- the problem is  
25 that it sort of attracts one's eye the same way that a



1 mosquito bite -- you know, that you pick at it. It's this  
2 thing that you can't not look at, I think, is -- is the --  
3 the issue.

4 MS. BROWNE: I'm going to take just one minute, if I  
5 will, and I think I'm probably all done.

6 A Okay.

7 MS. BROWNE: I don't have anything further. Thank you.

8 MS. HILTON: Okay. Thank you, both. Do commissioners  
9 have anything else? I maybe should ask you that before --.  
10 Okay. Fred has a couple things he wants to enter into the  
11 record.

12 MR. TODD: The material I asked of Mark Caron regarding  
13 lynx habitat evaluation I'm entering as Exhibit 7-E3, and  
14 the e-mail -- the chain of e-mails that I circulated a copy  
15 of to the Commission between myself, Bob Marvinney and John  
16 Hopeck I'm entering as Exhibit 7-F4.

17 MS. HILTON: Also, I just want to say that there are  
18 several issues that have arisen during these hearings that  
19 may require some follow-up by the Commission. And I will  
20 work with the staff to address those issues, in other  
21 words, to get things into the record that need to get into  
22 the record through procedural orders.

23 And then I don't think I have anything else other than  
24 the closing statement. I wish to remind everyone that the  
25 record of this hearing will remain open until Monday, July

1 18 to receive written statements from the interested public  
2 and for an additional seven days until Monday, July 25th  
3 for the purpose of receiving rebuttal comments.

4 No additional evidence or testimony will be allowed  
5 into the record after the closing of the record. I wish to  
6 remind the parties that the third procedural order  
7 establishes the process for parties to request permission  
8 to submit additional comments into the record following the  
9 close of today's technical session.

10 I declare this hearing closed.

11 (Concluded this hearing at 12:10 p.m. this date.)  
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CERTIFICATE

I, Angella D. Clukey, a Notary Public in and for the State of Maine, hereby certify that on July 6, 2011, a hearing was held regarding Bowers Mountain, Development Permit DP 4889; and that this hearing was stenographically reported by me and later reduced to typewritten form with the aid of computer-aided transcription; and the foregoing is a full and true record of the testimony given by the witnesses.

I further certify that I am a disinterested person in the event or outcome of the above-named cause of action.

IN WITNESS WHEREOF, I subscribe my hand and affix my seal this 27th day of June 2011.

ANGELLA D. CLUKEY, NOTARY PUBLIC  
Court Reporter

My commission expires: March 17, 2017

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