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STATE OF NEW HAMPSHIRE  
SITE EVALUATION COMMITTEE

April 7, 2011 - 1:30 p.m.  
Public Utilities Commission  
21 South Fruit Street  
Suite 10  
Concord, New Hampshire

DAY 1  
DELIBERATIONS  
AFTERNOON SESSION ONLY

RE: SEC DOCKET NO. 2010-01  
Application of Groton Wind, LLC,  
for a Certificate of Site and  
Facility for a 48 Megawatt Wind  
Energy Facility in Groton,  
Grafton County, New Hampshire.  
(DELIBERATIONS OF SUBCOMMITTEE)

PRESENT:	SITE EVALUATION SUBCOMMITTEE:
Chairman Thomas B. Getz (Presiding)	N.H. Public Utilities Comm.
Robert Scott, Director	Air Resources Division - DES
Brook Dupee, Bureau Chief	Dept. of Health & Human Serv.
Richard Boisvert	N.H. Div. of Historical Res.
Stephen Perry, Chief	Inland Fisheries - N.H. F&G
Charles Hood, Admin.	Dept of Transportation
Donald Kent, Admin.	Dept. of Resources & Econ. Dev.
Eric Steltzer	Office of Energy & Planning
Michael Harrington	Public Utilities Commission

\* \* \*

Counsel for the Committee: Michael Iacopino, Esq.

COURT REPORTER: Susan J. Robidas, LCR NO. 44

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1 P R O C E E D I N G S (resumed)

2

3 CHAIRMAN GETZ: Okay. Good afternoon.  
4 We're back on the record for deliberations in Site  
5 Evaluation Committee Docket, it is 2010-01. And let  
6 me say one thing before we turn to Mr. Scott and the  
7 discussion of the issues regarding air and water  
8 quality, and that concerns a final order in this  
9 case.

10 The procedure is that, after we  
11 deliberate orally, then counsel will draft an order  
12 memorializing the decisions and the reasoning behind  
13 the decision, and they will be made available to us  
14 for our review and ultimate signature. And it's the  
15 order that then contains the decision and has the  
16 binding effect in this case. And currently, the  
17 deadline for issuing an order is April 26th. So I  
18 just wanted to make that clear.

19 And with that, Mr. Scott.

20 MR. SCOTT: Okay. Good afternoon,  
21 everybody. So again, I'll be discussing air and  
22 water quality, starting with, again, which I know you  
23 all know this, 162-H:1 under the Purpose statement.  
24 Again, that talks about a balance between environment

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1 and the need for energy facilities that -- "balance"  
2 to me, again, doesn't mean there's zero impact. It  
3 means there's a balance to be made with that. And,  
4 again, more specifically, we need to make a ruling on  
5 is there an unreasonable adverse effect on, in this  
6 case, air and water quality.

7 So, the first thing I'd like to do is  
8 draw your attention to the October 8th, 2010 issuance  
9 from the Department of Environmental Services of what  
10 they title is "Final Decision and Conditions." What  
11 this includes is a alteration of terrain decision or  
12 permit, as well as a Wetlands Bureau final decision,  
13 also with conditions. I'll come back to this. But  
14 this basically is fairly broad and encompassing. It  
15 includes things ranging from obligations on how to  
16 handle fuels within the project as construction is  
17 going, to mitigating following best management  
18 practices for blasting, to again mitigating, to the  
19 extent possible, wetlands and stream impacts. Of  
20 interest, among other things, is it also requires the  
21 restoration of impacts, to the extent there can be  
22 for the project. And there are mitigation  
23 conditions, including the requirement for a one-time  
24 payment of 15 -- excuse me -- \$150,000 to the

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5

1 Department of Environmental Services Aquatic Resource  
2 Mitigation Fund, or the ARM fund. There is also a  
3 requirement for -- that nine existing stream  
4 crossings along Groton Hollow Road be upgraded.  
5 Similarly, the conditions of this approval would  
6 require that the project donate to the Society for  
7 the Protection of New Hampshire Forests the property  
8 survey data and mapping, title research and  
9 environmental baseline data to support the Society's  
10 efforts in preserving over 6500 acres of undeveloped  
11 land in the Green Acre Woodlands project area.

12 So I'll come back to that. But I  
13 think, Mr. Chair, we'll need to vote to incorporate  
14 these permits into the certificate itself, I believe.  
15 But I think it may make more sense to talk through  
16 the positions of the Applicant and the intervenors  
17 before we do that.

18 CHAIRMAN GETZ: Yes. And I think --  
19 I'm trying to recall exactly how we treated the  
20 permits in the past. They've been appended to the  
21 decisions and made conditions of it. So I think if  
22 you want to discuss the other issues generally, then  
23 we can include that in our final consideration of the  
24 issues -- deliberations of these issues, a motion on

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1 what to include or how to include it in the order.

2 MR. SCOTT: Okay. So, again, my task  
3 is to talk about air and water quality impacts as  
4 outlined in the statute. I'll start with air  
5 impacts.

6 The Applicant cites there are no air  
7 quality impacts directly. They do -- and there's  
8 some disagreement from the intervenors on greenhouse  
9 gas benefit and how that's quantified and how much  
10 benefit there may be for greenhouse gas emissions  
11 reductions. But I would -- my observation is there's  
12 no -- nobody's made a case that there is an air  
13 quality impact from the project itself. So I guess I  
14 can parse this out, Mr. Chair. I guess that would be  
15 the first thing. But I don't think that's contested,  
16 other than, again, some -- there are -- between the  
17 Applicant and the intervenors, there are -- there is  
18 some language from the intervenors, again,  
19 disagreeing over the extent of the benefit, but not  
20 to the fact that there's air quality -- adverse air  
21 quality impact.

22 So I guess maybe that could be my  
23 first motion. Or do you want to handle them both  
24 together?

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7

1 CHAIRMAN GETZ: I think we can  
2 segregate air from water. That makes sense.

3 MR. SCOTT: Okay. So with that, I  
4 would move that we vote that there is no unreasonable  
5 adverse effect on air quality for this project.

6 CHAIRMAN GETZ: Hear a second?

7 MR. STELTZER: So moved.

8 CHAIRMAN GETZ: Mr. Steltzer second.  
9 Any discussion?

10 (No verbal response)

11 CHAIRMAN GETZ: Okay. Hearing no  
12 discussion with respect to the issue of whether  
13 there's an unreasonable adverse effect --

14 MR. HARRINGTON: Maybe one point, Mr.  
15 Chairman. I just want to make note of the issue of  
16 some of the things that Mr. Scott just spoke of about  
17 the benefits of the project and so forth, which  
18 really have nothing to do with adverse effects on air  
19 quality. It's something I was referring to earlier  
20 that we would be speaking to again earlier. But it  
21 doesn't have any impact on the adverse effect on air  
22 quality. I agree with his motion.

23 CHAIRMAN GETZ: Anything else?

24 (No verbal response)

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8

1 CHAIRMAN GETZ: Okay. Then all those  
2 in favor of Mr. Scott's motion with respect to air  
3 quality, signify by raising your hand.

4 (Multiple members raise hands.)

5 CHAIRMAN GETZ: I'll note that the  
6 vote is unanimous.

7 MR. SCOTT: So I'll move on to water  
8 quality. Again, the Applicant has put forward no  
9 unreasonable effect on water quality, citing, again,  
10 the permit, the DES permits. And again, they cite  
11 the minimized water quality impacts, meaning the  
12 project won't impact more than -- a little bit more  
13 than 1.6 acres -- again, the mitigation plan for the  
14 \$150,000 to the Aquatic Resource Mitigation fund, the  
15 upgrade to the nine stream crossings. And again,  
16 they assert that both the wetlands and the alteration  
17 of terrain permits and the 401 water quality  
18 certificate will all cover adequately the  
19 requirements for water quality.

20 Also, in the March testimony, I think  
21 Mr. Cherian -- I know Mr. Cherian has also brought up  
22 again that there's a spill control plan put in place  
23 that will address some of the concerns that the  
24 intervenors have asked about, which I will cover in a



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1 moment. So, again, that's -- summarizing, that's the  
2 position of the Applicant.

3 Looking at the intervenor group, they  
4 have taken issue with, again, as I mentioned earlier  
5 about the air-pollution issues, about the greenhouse  
6 gas. But similarly, I think on the water quality  
7 front, again condensing and summarizing, they've  
8 raised issues about well water contamination due to  
9 blasting; similarly, muck pile management with  
10 concerns regarding nitrate and other contamination of  
11 the groundwater, and the fact there may be some  
12 impact to local aquifers. So those are concerns laid  
13 out by the intervenors.

14 Additionally, I think Ms. Lewis  
15 expressed concern in her prefiled testimony, among  
16 other places, of oil contamination, for instance,  
17 transformer oil, et cetera. And again, I note that  
18 the DES permits have a requirement, as there are  
19 federal requirements for spill containment plans.  
20 And again, that was noted in Mr. Cherian's March  
21 testimony.

22 Still regarding the intervenors, the  
23 Groton Hollow Road residents have requested a change  
24 of conditions from what the Department of

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1 Environmental Services has in their permits.  
2 Currently, DES has conditions requiring that, within  
3 2,000 feet of blasting, that water wells will be  
4 tested. The residents have asked for 3,000 feet. So  
5 they've asked for a change of that condition. The  
6 Applicant has responded that that's not acceptable to  
7 them.

8 My understanding, and I guess that  
9 should be what we -- one thing we vote on soon here,  
10 would be that the 2,000 feet is a standard practice,  
11 my understanding is, from the Department of  
12 Environmental Services. My understanding also is  
13 that DES does have authority to go beyond 2,000 feet,  
14 should there be a demonstrated need. So I guess I  
15 would -- again, we should talk about this more for a  
16 vote. But that is the first -- frankly, that's the  
17 only condition that I'm aware of that hasn't been  
18 addressed and has been asked to go beyond that. And,  
19 again, typically, the permit, what's been agreed to,  
20 includes a lot of best management practices. But  
21 this would be the deviation that I've culled out that  
22 the intervenors have asked for.

23 CHAIRMAN GETZ: I'm sorry. Could you  
24 just go through that briefly?

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11

1 MR. SCOTT: Sure. So let me see if I  
2 can find the wetlands permit requirement.

3 So, basically, the issue has to do  
4 with blasting. And the concern of blasting is for  
5 nitrate infiltration, if you will, in the  
6 groundwater -- in this case, drinking wells. So the  
7 current -- I got to find it now. The current DES  
8 requirement is for all wells within 2,000 feet to get  
9 basically pre-tested, so you can basically get a  
10 background level. The nitrates from blasting aren't  
11 the only source of nitrates. You can get it from  
12 fertilizers and other things.

13 So the current requirement would be  
14 2,000 feet to do pre-testing, in case there's an  
15 issue that comes out. My understanding is the  
16 intervenors have asked for that to be changed to  
17 3,000 feet, to make that a requirement. And let me  
18 see if I can find the -- direct you to the permit  
19 conditions.

20 CHAIRMAN GETZ: I think that's  
21 sufficient for what I was trying to understand.

22 MR. SCOTT: So I guess maybe I'll make  
23 the motion that, understanding the Applicant's  
24 concern, but with my understanding that the 2,000

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1 feet is the standard with what the Department of  
2 Environmental Services does in these situations, and  
3 with the understanding that, should an issue come up  
4 at a later date, the Department of Environmental  
5 Services does exercise its authority to go beyond  
6 2,000 feet if it comes up at that time, I don't see a  
7 need. So I would move that that condition not be  
8 included in the -- that basically the 2,000 feet  
9 remain the condition that we accept.

10 CHAIRMAN GETZ: Well, I think in terms  
11 of mechanics, I don't know that it's necessary to  
12 make the motion. I think in terms of discussion, I  
13 think what you're saying is that this certificate, as  
14 is, is sufficient and that you don't see any need for  
15 an additional or expanded condition. So I think  
16 whenever you get to making a motion, we can make  
17 that --

18 MR. SCOTT: Okay.

19 CHAIRMAN GETZ: -- if you don't think  
20 that's necessary --

21 MR. SCOTT: No, I agree with you.

22 CHAIRMAN GETZ: -- then make the  
23 motion based on the permit as is.

24 MR. HARRINGTON: Mr. Chairman, can I

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1 just ask a question?

2 Mr. Scott, as far as this, can you  
3 explain a little more? I understand the 2,000 versus  
4 3,000 feet, and there would be a pre-blasting survey  
5 done of these wells to establish a baseline. And  
6 then for how long after the blasting do they continue  
7 to monitor the wells?

8 MR. SCOTT: If I could direct -- I  
9 found the cite. So it's probably good that we look  
10 at that. So, again, I'm talking about the  
11 October 8th, 2010 DES letter. It's on Page 3, in  
12 Section 21. So I'll read it for the record.

13 "The Applicant shall identify drinking  
14 water wells located within 20" -- excuse me -- "2,000  
15 feet of the proposed blasting activities." That's  
16 the first sentence. The next sentence: "Develop and  
17 implement a groundwater quality sampling plan to  
18 monitor for nitrate, and nitrate either in drinking  
19 water, supply wells, or in other wells that are  
20 representative of the drinking water and supply wells  
21 in the area. The program must be approved by the DES  
22 Drinking Water Bureau." So it's left frankly open  
23 for DES. They have to submit a plan to the  
24 Department of Environmental Services for approval.

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1 MR. HARRINGTON: And then I guess -- I  
2 mean, I'm not that familiar with that. But I'm  
3 assuming, though it's not specifically stated, that  
4 if it's determined that there is nitrates above the  
5 baseline showing up in drinking water, that it would  
6 be the responsibility of the Applicant to mitigate  
7 that condition?

8 MR. SCOTT: If it's from this  
9 activity, in accordance with the plan that DES  
10 approves.

11 MR. HARRINGTON: And how does that  
12 work? I mean, let's just say there's nitrates that  
13 spread throughout the aquifer there. And is it then  
14 they're responsible for drilling new, deeper wells,  
15 bringing in bottled water or -- I'm just trying to  
16 think of how you deal with a house where the well's  
17 contaminated? I mean, there's not too much options  
18 there, are there?

19 MR. SCOTT: Again, it's a little bit  
20 outside my expertise. But it could be remediation.  
21 It could be, as you say, drilling a well,  
22 potentially. It could be bringing bottled water in.  
23 Again, that would be part of the plan.

24 MR. HARRINGTON: Okay.

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1 CHAIRMAN GETZ: And then recourse is  
2 through DES.

3 MR. SCOTT: Correct.

4 CHAIRMAN GETZ: Any other discussion?

5 MR. HARRINGTON: Just one other  
6 follow-up. I don't know, maybe Mr. Iacopino could  
7 address this. More of a legal issue.

8 Does DES have the statutory authority  
9 to charge the Applicant what it takes in order to  
10 make sure that the water situation is cleaned up? I  
11 mean, do they -- what can they do? Can they turn  
12 around and -- my concern is, let's just say something  
13 does happen, and there's nitrates in the water well  
14 above the baselines. Considering it has been cleaned  
15 up and the option is to put in, I don't know, a  
16 filtration system in each house that costs \$50,000,  
17 does DES have the statutory authority to order the  
18 Applicant to, say, spend half a million, a million  
19 dollars to do this?

20 MR. SCOTT: I don't see DES every  
21 ordering you will spend X amount of money, per se.  
22 Typically, DES would order that they rectify the  
23 issue. So --

24 MR. HARRINGTON: Right. But what are

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1 the options if they don't rectify it then? I mean,  
2 you're going to tell them what? Turn off your  
3 windmills or -- I'm just trying to figure out how  
4 that works out. Because it's not a situation where  
5 they can say, well, I'll just turn my windmill off  
6 and go home, and I'll take the problem with me. The  
7 blasting has caused the problem, even if the  
8 windmills never turn once. But the blasting could  
9 have a problem on those wells. So, what do they do  
10 to ensure that, if for some reason something happens  
11 there, then this project decides to get cancelled  
12 because they don't get their federal funding or  
13 something, that the blasting's already done, the  
14 water's been screwed up? What recourse do people  
15 have that now their wells are no good?

16 MR. SCOTT: Again, I'll answer two  
17 questions. DES does have the authority -- this goes  
18 on way independent of these type of projects. It's a  
19 little bit outside my general expertise, so I don't  
20 want to be testifying. I want it to be, obviously,  
21 based on what we do for the record.

22 But again, DES typically would be  
23 requiring a remedy. So whether that's -- as you  
24 mentioned yourself, it's not outside the realm of



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1 possibility, my understanding, you will now provide  
2 bottled water, you'll provide some other source -- to  
3 the extent that remediation can happen, that the  
4 water will be cleaned, if you will. That's been  
5 known to happen in the past also.

6 CHAIRMAN GETZ: Mr. Hood.

7 MR. HOOD: Just maybe to clarify a  
8 little bit. We recently had kind of a situation down  
9 on our I-93 project where Exit 3 we were blasting.  
10 And we were blasting a lot of rock. We had over  
11 800,000 cubic feet. So we had more blasting going on  
12 down there than what is going to happen, I assume,  
13 with these particular locations. But we had  
14 monitoring wells in place for other issues. And  
15 while we were testing those, we determined there  
16 was -- nitrates were going into directions that were  
17 getting into people's wells. And we did -- DES --  
18 coordinated with DES, and we shut down our blasting  
19 until we did some remedial action, which was -- in  
20 different cases we did do filtration in some houses.  
21 In other houses we'd give them bottled water. And  
22 we're still doing that. It's on our dime because we  
23 were the ones that did the project and because our  
24 blasting caused those problems. So we're still doing

1           that.

2                           My understanding, though -- again, I'm  
3           not the expert on this -- but the nitrates, they are  
4           fairly fast-moving. It's not forever. Once it gets  
5           into the water, it dissipates fairly quickly. So  
6           it's not going to be a forever type of situation, but  
7           it would be for a temporary situation. At this time  
8           we're still doing bottled water. We still have  
9           filtration systems in place. But at some point in  
10          time, additional testing will be going on and we hope  
11          to get off that situation.

12                          MR. IACOPINO: Mr. Chairman, just to  
13          answer the legal question that was posed, I would  
14          draw the Committee's attention to RSA 162-H, Section  
15          12, entitled "Enforcement," specifically Subsection  
16          IV which specifically states, "Notwithstanding any  
17          other provision of this chapter, each of the other  
18          state agencies having jurisdiction shall retain all  
19          of its powers and duties of enforcement." So DES  
20          could enforce this in the same manner that they  
21          enforce it in other types of projects as well.

22                          In addition, the Committee has the  
23          power to delegate the authority to monitor the  
24          construction or operation of any portion of the

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19

1 facility to a state agency as it deems appropriate,  
2 and that authority is contained in RSA 162-H:4, III.  
3 So you do have some delegation authority if you  
4 wanted to provide a more specific protocol or  
5 whatever for the DES to follow in the event that this  
6 issue arises.

7 MR. HARRINGTON: Just a follow-up  
8 question. The specific condition that the  
9 intervenors were asking for was that all residents  
10 within 3,000 feet of blasting have their wells tested  
11 prior to the blasting, paid for by the Applicant. So  
12 they're not actually asking for the groundwater  
13 quality sampling program to extend out to 3,000 feet,  
14 but only that the baseline testing extend out to  
15 3,000 feet. And I just -- again, not being an expert  
16 on groundwater, without the baseline, if the problem  
17 were to be -- let's say it did manifest itself, or it  
18 seemed to manifest itself beyond 3,000 feet. How  
19 could anybody make the case -- I mean, someone could  
20 make the case, well, that's coming from fertilizers  
21 from the farm over there, and there's no baseline.  
22 It would make it difficult.

23 So I'm wondering, put this out to the  
24 Committee: Is it worthwhile to consider having the

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1 testing done for wells up to 3,000 feet away, but  
2 limit the groundwater quality program to 2,000 feet  
3 until such time that DES, it sounds like, could  
4 extend it if they felt there was an issue? But  
5 without the baseline testing, I think that would be  
6 pretty difficult to just get going on. So I don't  
7 know what other people think about that.

8 CHAIRMAN GETZ: Anybody have any --

9 MR. BOISVERT: Baseline testing sounds  
10 like an appropriate step if there is concern. It  
11 makes sense that all parties know in advance what the  
12 situation is, if there is a problem with certain  
13 contaminants before the blasting takes place, and  
14 then it protects from misunderstanding.

15 MR. HARRINGTON: It protects both  
16 parties I would think.

17 MR. BOISVERT: Right, it protects both  
18 parties. I think that's a reasonable condition.

19 MR. HOOD: Mr. Chairman, one thing  
20 that might, depending on the conditions out there --  
21 and I don't know how many wells we're talking about  
22 that need to be tested to go from the 2,000 up to the  
23 3,000. But it could be, if the groundwater's  
24 flowing, and you know which direction it's flowing,

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1 that you maybe put in a monitoring well somewhere up  
2 above where the house is, where the well's going to  
3 be, so that you could test at that particular well  
4 and not have to test all the other wells down from  
5 there, and then you know if it's getting into that  
6 well and moving that way. So if there's 10 or 12  
7 homes that have wells, instead of having to test all  
8 those or check all those, you could put in a couple  
9 of monitoring wells that would pick up the water  
10 that's going to get into those wells. We've done  
11 that before as well.

12 MR. HARRINGTON: Might that be  
13 included as part of this groundwater quality sampling  
14 program? I don't know if you know that, Mr. Scott,  
15 or not.

16 MR. SCOTT: No.

17 CHAIRMAN GETZ: Well, that, I guess,  
18 gets to the issue of how specifically can we define  
19 whether you make a broader requirement that for the  
20 pre-base -- the baseline testing, the 3,000 feet, and  
21 just make that a requirement, or that you then get  
22 into alternatives for how you would do that.

23 MR. HARRINGTON: I hate to over-  
24 second-guess the DES, because they are the water

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1 people. They are the professionals that are doing  
2 this. So I'm just putting these things out as  
3 possible consideration. From what I read, I had some  
4 concern, but...

5 CHAIRMAN GETZ: Mr. Scott.

6 MR. SCOTT: Again, I'm not opposed to  
7 that. I suppose being more protective, I guess,  
8 can't hurt anything. My point was 2,000 feet is the  
9 standard for what the Department does. And based on  
10 this, on the approval, the Department has looked at  
11 it and didn't see a need to go beyond that, for the  
12 hydrology and other reasons.

13 MR. HARRINGTON: I would tend to go  
14 along with that then, because I don't see -- the  
15 3,000 is just an arbitrary number that somebody come  
16 up with. As far as what they put in evidence, I  
17 don't see any specific justification for going to it,  
18 other than it's more than 2,000 feet. And if people  
19 at DES came up with 2,000 feet based on the standard  
20 analysis of it, then I guess I'd stick with what they  
21 say.

22 CHAIRMAN GETZ: Any other discussion  
23 about these issues?

24 Let me just give a little -- I think

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1 Mr. Iacopino went into some of the background. But  
2 let me kind of lay out that there's about three  
3 sources of statutory background to this issue. One  
4 is under 162-H:6-a, which is kind of a fundamental  
5 section that talks about time frames for review of  
6 renewable energy facilities. Under Subsection VI, it  
7 points out that all participating state agencies  
8 shall make and submit to the Subcommittee a final  
9 decision on the parts of the application that relates  
10 to its jurisdiction no later than 180 days after the  
11 application has been accepted.

12 And so what we have here are the  
13 permits from DES that Mr. Scott's talked about. And  
14 that's -- those permits in the previous two orders on  
15 the wind projects, there's been a discussion about  
16 those permits in the orders. And, you know, in  
17 Lempster, for instance, it noted that the wetlands  
18 permit and its conditions shall be included in the  
19 certificate of site and facility, and also that the  
20 Water Division of DES shall issue the alteration of  
21 terrain permit for water quality certificates, and  
22 both permits and conditions be part of the  
23 certificate for site and facility. And then there  
24 was a specific delegation of authority to the Water

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1 Division of DES to monitor the construction and  
2 operation of the proposed facility for compliance  
3 with the terms and conditions. So that's the way  
4 it's been applied in the past.

5 I'd also note, as Mr. Scott did, that  
6 there's two references, really, in the Findings  
7 section, 162-H:16. In the preface section, IV, it  
8 says the Site Evaluation Committee, after having  
9 considered available alternatives and fully reviewed  
10 the environmental impact of the site or route, then  
11 it shall make these other findings. And one of those  
12 findings is whether there's an unreasonable adverse  
13 affect on air and water quality.

14 And so in the orders on this, it's  
15 linked those two sections, those two requirements.  
16 So there's a discussion of the permits that are  
17 issued making them binding on the Applicant and then  
18 a finding that the -- with respect to air and water  
19 quality based on the certificates themselves. So,  
20 just for some background on the structure of how the  
21 permits relate -- how DES's obligations relate to our  
22 obligations and how the permits relate to the order  
23 and how it fits into the findings we have to make.

24 MR. SCOTT: Mr. Chairman, just for the



[DELIBERATIONS]

1 record, too, the substation in Holderness, that did  
2 not have impacts that required any kind of  
3 permitting. So I'd put that on the record also.

4 CHAIRMAN GETZ: So is there -- we've  
5 had a motion and a vote on air quality. Is there a  
6 motion on water quality, Mr. Scott?

7 MR. SCOTT: I move that we vote that  
8 there is no undue -- excuse me. I want to get the  
9 right wording. Adverse --

10 CHAIRMAN GETZ: Unreasonable.

11 MR. SCOTT: -- unreasonable -- thank  
12 you -- impact on water quality due to the project  
13 based on acceptance of the DES permits into the  
14 certificate.

15 CHAIRMAN GETZ: And that finding is  
16 subject to the conditions of the permits; correct?

17 All right. Do we have a second? Mr.  
18 Perry.

19 MR. PERRY: Second.

20 CHAIRMAN GETZ: Any discussion?

21 MR. IACOPINO: Mr. Chairman, I would  
22 just point out for the record that those permits are  
23 located in Applicant's Exhibit 5, which is the  
24 supplement to the application, Volume IA, and they

[DELIBERATIONS]

26

1 are under Tab 51 of that volume, just so that the  
2 record's clear where those permits are.

3 CHAIRMAN GETZ: Thank you.

4 Further discussion?

5 (No verbal response)

6 CHAIRMAN GETZ: Hearing none, then all  
7 those in favor of the motion by Mr. Scott signify  
8 their concurrence by raising their hand.

9 (Multiple members raise hands.)

10 CHAIRMAN GETZ: Note for the record  
11 that the vote is unanimous.

12 So, anything further, Mr. Scott?

13 MR. SCOTT: That's all.

14 CHAIRMAN GETZ: Let's turn to the next  
15 item, Natural Environment. Dr. Kent.

16 DR. KENT: I'd like to review the  
17 Applicant's information, including the results of  
18 studies, before we turn our attention to the proposed  
19 conditions. So bear with me. This will take a  
20 little bit. There's a lot of work here.

21 Groton Wind consulted with Stantec  
22 Consulting, VHB, and New Hampshire Audubon to  
23 complete a number of wildlife and other surveys.  
24 Plant community types were identified using data

[DELIBERATIONS]

1 based on New Hampshire Fish and Game Wildlife Action  
2 Plan. There were a number of wildlife surveys, a  
3 variety of bird field surveys conducted within the  
4 project area over the course of three years: 2006,  
5 2008 and 2009. Bird and bat risk assessment was  
6 prepared using the results of on-field surveys --  
7 on-site surveys -- excuse me -- and a risk assessment  
8 sought to characterize the use of the project area  
9 and assess potential risk presented by the project to  
10 raptors, nocturnally migrating passerines, breeding  
11 birds and bats.

12 During the course of the surveys they  
13 identified peregrine falcons, bald eagles, common  
14 loons, all three of which are state-listed threatened  
15 species. They did not find any federally-listed  
16 threatened or endangered birds during any of the  
17 field surveys.

18 Results of radar surveys suggested  
19 that migration patterns of nocturnal migrants were  
20 similar between the fall and the spring.

21 Post-construction monitoring studies conducted at the  
22 Lempster Wind project in 2009 showed very low  
23 mortality for nocturnally migrating birds.

24 Literature review suggests that, while

1 impacts to nocturnally migrating birds occur at most  
2 wind energy facilities, very small numbers of birds  
3 have collided with turbines relative to the large  
4 numbers of nocturnally migrating songbirds. The  
5 results of a bird and bat risk assessment prepared by  
6 the Applicant's consultants followed a standardized  
7 weight-of-evidence approach and concluded -- let's  
8 see. The results of the on-field surveys produced a  
9 low magnitude of potential impact to nocturnal  
10 migrants.

11 Breeding birds. No state- or  
12 federally-listed species were observed during the  
13 breeding bird surveys. Generally, direct and  
14 indirect impacts to breeding birds at the project are  
15 expected to be limited to a small amount of collision  
16 mortality and slight shifts in the distribution of  
17 breeding bird species.

18 The results of the bird and bat risk  
19 assessment predicted a low magnitude of potential  
20 impact to breeding birds.

21 Raptor migration. Species observed  
22 most frequently during the spring and fall migration  
23 surveys included broad-winged hawk, red-tailed hawks  
24 and turkey vulture.

[DELIBERATIONS]

1                   Two state-endangered raptor species  
2                   were observed in 2009, the golden eagle and Northern  
3                   Harrier; however, neither occurred in the project  
4                   area.

5                   Two state-threatened raptor species  
6                   were observed, peregrine falcon and bald eagle, both  
7                   of which were observed in the project area. The  
8                   common loon was also observed.

9                   During the first year of  
10                  post-construction monitoring studies at Lempster in  
11                  2009, no raptor fatalities were documented. The  
12                  results of the bird and bat risk assessment predicts  
13                  a low magnitude of potential impact to raptors.

14                  Peregrine use. There were  
15                  peregrine-use surveys in 2006 and 2009. Over the  
16                  course of the surveys, only four peregrine falcons  
17                  were observed within the project area, with three of  
18                  the four peregrine falcons observed flying within the  
19                  project boundary. There's been a low documented  
20                  peregrine falcon mortality at wind projects. The  
21                  summer/early fall, peregrine falcon surveys also  
22                  documented low to moderate numbers of seasonally  
23                  local and migrant raptors at locations above the  
24                  project area, and relatively high percentages of

[DELIBERATIONS]

1 raptors flying below the height of proposed turbines.

2 The bird and bat risk assessment  
3 predicted a low magnitude of potential impact to  
4 raptors, including peregrine falcon.

5 Bats. Two seasons of summer/fall  
6 acoustic monitoring found relatively low bat activity  
7 in comparison to similar studies conducted at other  
8 proposed wind projects in the Northeast, including  
9 those that are currently operational. Bat activity  
10 levels recorded within the project area were  
11 generally low.

12 Post-construction studies conducted in  
13 2009 at Lempster documented only one little brown bat  
14 fatality. Indirect impact to bats are expected to be  
15 minor at the project.

16 Avian and bat mitigation. Groton will  
17 commit to one year of formal post-construction  
18 monitoring, similar to efforts currently underway at  
19 Lempster. This study will cover both spring and fall  
20 migration seasons for both birds and bats. If, after  
21 one year of study, the project's mortality rates are  
22 lower or within the range of other northern forested  
23 wind project locations, Groton Wind will immediately  
24 implement yearly monitoring for the life of the

[DELIBERATIONS]

1 project as described in the Iberdrola Renewables  
2 Avian and Bat Protection Plan. This includes  
3 training operations staff in wildlife reporting and  
4 handling system for avian and bat casualties or  
5 injured wildlife.

6 If, after the first year of study,  
7 Groton Wind's mortality rates exceed the most current  
8 established threshold ranges for mortality at wind  
9 projects on northern forested ridges, Groton Wind  
10 will conduct a second year of post-construction  
11 monitoring similar to the first, but with an emphasis  
12 on determining why mortality rates have exceeded  
13 estimated thresholds.

14 Other wildlife. The project site  
15 provides wildlife habitat for a number of species,  
16 albeit modified substantially by the timber  
17 harvesting operations. Moose and bear, and moderate  
18 to heavy use by a variety of wildlife species, there  
19 should not be a substantial change in the patterns of  
20 wildlife habitat use and in movements around the  
21 site.

22 Natural Heritage Bureau found no known  
23 state- or federally-listed species within the project  
24 limits or any of the exemplary natural communities.

[DELIBERATIONS]

1                   Natural Heritage Bureau indicated  
2                   there were populations of wood turtle and peregrine  
3                   falcon in the vicinity of the site. Native  
4                   population of brook trout occur in Clark Brook, as  
5                   well as the potential for deer wintering areas on the  
6                   project site. The Applicant's consultants determined  
7                   that it's unlikely that any wood turtles exist on the  
8                   site. Three deer wintering yards were identified.  
9                   One seemed to be in use in the yard's position in the  
10                  lower valley and away from the proposed wind turbines  
11                  and is not expected to be impacted.

12                  Proposed improvements to the access  
13                  roads, particularly the culverts, should improve  
14                  Eastern Brook Trout habitat.

15                  Eleven vernal pools were identified on  
16                  the project site, and another six wetlands with the  
17                  potential to be vernal pools were identified. The  
18                  project has been designed to avoid direct impact to  
19                  vernal pools. Three cases where there will be  
20                  indirect impacts to documented vernal pools.

21                  As to the Avian and Bat Protection  
22                  Plan that the Applicant proposes as a condition, as I  
23                  said earlier, typically there's one year of intensive  
24                  study which may include: Avian and bat mortality



[DELIBERATIONS]

1 monitoring, avian-use surveys, raptor nest surveys,  
2 radar studies and/or thermal imaging. That's the  
3 formal monitoring.

4 If the first year's results indicate  
5 that the mortality is not much different than at  
6 other facilities, the second year will be the  
7 beginning of informal monitoring, called an  
8 informal -- excuse me -- will implement a  
9 site-specific wildlife reporting and handling system.  
10 The operator who finds a dead bird or bat will leave  
11 it in place, photograph it and record the finding.  
12 If the bird's a protected species, the fact should be  
13 reported to Iberdrola's environmental staff, who will  
14 inform the appropriate state or federal wildlife  
15 agency. Any eagle carcass must ultimately be  
16 delivered to the National Eagle Repository. If a  
17 bird or bat is alive but injured, the operator will  
18 notify the wildlife rehabilitation center.

19 Several impact reduction and  
20 mitigation measures were proposed in the Avian and  
21 Bat Protection Plan. For example: Iberdrola is  
22 exploring the use of permanent on-site radar to  
23 detect major migration events and movements in the  
24 vicinity of turbines; off-site retrofitting of

[DELIBERATIONS]

1 transmission and distribution lines with avian-safe  
2 design; adaptive management measures, including  
3 research that will reduce bat impacts... such as  
4 curtailments or relocation of turbines would be  
5 considered a last resort. And experimentation with  
6 seasonal curtailment to determine whether management  
7 actions, such as changing turbine cut-in wind speeds  
8 with certain combinations of wind speed, time of  
9 year, time of night, might significantly reduce bat  
10 mortality; bat-deterrent devices; expanded research  
11 in bat risk assessment; habitat conservation, habitat  
12 enhancement; participation in regional conservation  
13 banks or acquiring conservation rights.

14 The Applicant had a meeting with U.S.  
15 Fish and Wild Service and the Department of Fish and  
16 Game to talk about birds and bats. To summarize  
17 those discussions, Fish and Wildlife Service stated  
18 the Concord office of the Fish and Wildlife Service  
19 stated -- or recommended three years of radar study  
20 to evaluate potential impacts to nocturnal migrants.  
21 Fish and Game suggested pre- and post-construction  
22 breeding bird surveys. Fish and Wildlife Service  
23 suggested acoustic monitoring for bats, including  
24 monitoring stations in the peaks and valleys of the

[DELIBERATIONS]

1 ridge. Fish and Game suggested Iberdrola work with  
2 Chris Martin of New Hampshire Audubon, as well as New  
3 Hampshire Fish and Game, to review specific peregrine  
4 falcon survey protocols.

5 A couple of results that are pertinent  
6 to this: Spring 2008 radar survey report. The  
7 overall passage rate for the survey period was 234  
8 targets per kilometer per hour; 12 percent of those  
9 targets were below the height or within the height of  
10 the towers themselves. So if you work out the  
11 numbers, 234 targets per kilometer per hour, 12 hours  
12 of study, gives you 2,808 targets. If 12 percent of  
13 those targets are within the range of the towers and  
14 the rotors, that's 336 birds and bats per night.

15 Diurnal raptor surveys. Eleven days  
16 in 2009, total of 175 raptors of 11 species. That's  
17 a spring survey. In the fall raptor survey, 10 days,  
18 696 raptor observations representing 14 species,  
19 including four bald eagles. Summer and early fall  
20 2009, peregrine falcon-use surveys over a 20-day  
21 period, 3 of the peregrine falcon observations from  
22 Tenney Mountain were peregrines within the project  
23 area, and the 3 observations occurred below the  
24 maximum height of the proposed turbines.

[DELIBERATIONS]

1                   During that survey, they also found  
2                   that 48 percent of 327 raptors that came from Bald  
3                   Knob occurred within the project area; 69 percent of  
4                   these observations occurred below the maximum turbine  
5                   height; 87 percent of raptor observations made from  
6                   Tenney Mountain occurred at some locations over the  
7                   project area; 54 percent of these raptor observations  
8                   occurred below the maximum turbine height. If you  
9                   work out those numbers, Bald Knob observations, we  
10                  have 108 raptors flying at a level that is at or  
11                  below the turbines; from Tenney Mountain, 122  
12                  raptors.

13                   And the last piece I want to share  
14                   with you is from Lempster. The 2009, the first year  
15                   of Lempster, was never available. It was directed to  
16                   Fish and Game. They weren't able to provide it. But  
17                   they did provide the 2000 [sic] post-construction  
18                   fatality surveys for Lempster. It has four  
19                   components: Standardized carcass surveys; searcher  
20                   efficiency trials; carcass removal trials; and  
21                   adjusted fatality estimates.

22                   A total of 11 bird carcasses and a  
23                   total of 14 bats were found. The annualized fatality  
24                   rate estimates are 5.27 birds per turbine, 7.13 bats

[DELIBERATIONS]

1 per turbine. For 12 turbines, that works out to 63  
2 bats -- 63 birds per year and 86 bats per year. If  
3 you extrapolated that to Groton and assume the same  
4 kind of mortality as the consultants have suggested  
5 on several occasions, Groton has 24 turbines; we're  
6 looking at 126 birds per year, 171 bats per year.

7 The Applicant has proposed that with  
8 regard to the natural environment, they proposed  
9 conditions that include the Iberdrola Avian and Bat  
10 protection Plan, which I've gone through with you,  
11 and the agreement with New Hampshire Fish and Game  
12 Department. New Hampshire Fish and Game Department  
13 conditions are stated in a letter of March 21st,  
14 2011. It says highlights of the agreement include  
15 the following expectations: Iberdrola will commit to  
16 bat acoustic detection monitoring during the first  
17 year of post-construction and will attempt to  
18 correlate the activity data with post-construction  
19 fatality. Iberdrola's committed to continue  
20 coordination with Fish and Game throughout the life  
21 of the project. Baseline and operational  
22 monitoring -- baseline is that first year that  
23 Iberdrola -- where they do fairly rigorous mortality  
24 surveys. Operational monitoring is when we turn it

[DELIBERATIONS]

1 over to the operations people, and they make note of  
2 dead birds and bats.

3 Baseline and operational monitoring  
4 will be conducted to collect information that will be  
5 used to implement adaptive management actions to  
6 minimize or avoid risks and identify mitigation  
7 measures.

8 Iberdrola has committed to conducting  
9 mortality surveys throughout the life of the project  
10 as described in the Groton Wind New Hampshire SEC  
11 Application and the avian bird and bat protection  
12 plan, using baseline and operational monitoring.

13 And finally, Iberdrola will provide a  
14 yearly mortality report to Fish and Game, including  
15 both baseline and operational monitoring, and will  
16 discuss any concerns with Fish and Game regarding  
17 mortality data, including the need for adaptive  
18 management measures.

19 So that's the information we're  
20 working with. Thank you for your patience. Let's go  
21 from there.

22 Public Counsel has recommended the  
23 same condition we used for Granite Reliable, which is  
24 basically three years of monitoring. Are there any

[DELIBERATIONS]

1 questions at this point before I leap into starting  
2 to express opinions?

3 CHAIRMAN GETZ: Mr. Perry.

4 MR. PERRY: Just so I understand the  
5 difference between the conditions that were with  
6 Granite Reliable and the Iberdrola Avian and Bat.  
7 It's one year of formal post and then a lifetime of  
8 reduced monitoring versus three fairly intensive  
9 years of post-mortalities. So it's a trade-off of  
10 two intensive years of post for the lifetime of, you  
11 know, walking through and randomly surveying for dead  
12 birds and bats. Is that really where the difference  
13 lays between the two?

14 DR. KENT: Yes. And I'm trying to  
15 find the exact language for Granite.

16 Do you have that? Forgive me.

17 MR. HARRINGTON: I think if you look  
18 on the afternoon of Day 4, under Lloyd-Evans's  
19 testimony, he does -- I think he goes into explaining  
20 the difference between his recommendations and those  
21 of Mr. Gravel's.

22 (Pause in proceedings while members  
23 read documents.)

24 DR. KENT: For Granite Reliable, the

[DELIBERATIONS]

1 Applicant shall implement a post-construction bird  
2 and bat mortality study designed by its consultants,  
3 reviewed and approved by Fish and Game. Studies  
4 should be conducted for three consecutive years, and  
5 a full report and analysis shall be produced after  
6 each year.

7 Applicant shall conduct additional  
8 pre-construction breeding bird surveys and raptor  
9 surveys, and such other surveys as can be  
10 accomplished prior to commencement of construction.  
11 So that's pre.

12 Applicant shall conduct  
13 post-construction breeding bird survey that replicate  
14 the pre-construction surveys for the project site.  
15 Protocol for such study shall be subject to review  
16 and approval. Post-construction studies shall occur  
17 at 1, 3 and 5 years after construction has been  
18 completed. A full report with analysis shall be  
19 submitted after each year. If the Applicant and New  
20 Hampshire Fish and Game cannot achieve consensus on  
21 any issue pertaining to such post-construction  
22 surveys, they may petition the Subcommittee for a  
23 final determination.

24 Further ordered, if after notice and



[DELIBERATIONS]

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1 an opportunity to be heard, the Site Evaluation  
2 Subcommittee determines that the project is having an  
3 unreasonable adverse impact on any species, it may  
4 take appropriate action within its jurisdiction.

5 MR. PERRY: Okay. So I think my  
6 understanding is, then, with the Granite Reliable, it  
7 leaves the door open if post-monitoring shows that  
8 mortality is higher than anticipated; that additional  
9 monitoring could occur above and beyond what's stated  
10 for three consecutive years, or year one, three and  
11 five. Would that be a correct interpretation?

12 DR. KENT: Yes. But not only  
13 monitoring, but any adaptations, mitigation that had  
14 to occur to lessen the impacts.

15 MR. PERRY: Okay. Thank you.

16 CHAIRMAN GETZ: Anyone else?

17 DR. KENT: Okay. Let me throw some  
18 things on the table for you.

19 The Applicant's consultant's basis for  
20 determining level of risk is based largely on  
21 mortality at other wind projects. In some sense,  
22 this is an uncomfortable standard, when what we're  
23 trying to do is try to determine if there's an  
24 impact. I'm not convinced that an impact that's

[DELIBERATIONS]

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1 comparable to impacts at other wind projects is an  
2 appropriate measure. It doesn't -- it leaves open  
3 the question: If impacts are bad or adverse at all  
4 wind sites, should we just allow more adverse impacts  
5 at this site because it's no different than the other  
6 sites? Not to mention there's hardly any forested  
7 sites in New England for comparison. Those that are  
8 there, like Lempster, are only a couple years into  
9 operation. So there's not a lot of material here.

10 But the question I throw out is, if  
11 there's no objective criteria here, the criteria is  
12 we're okay if we do no worse than anybody else  
13 running a wind project. And is that really an  
14 ecological basis for an assessment of whether we're  
15 impacting the environment, particularly birds and  
16 bats, or not? So I put that on the table.

17 Nobody wants to tackle that one, huh?

18 MR. HARRINGTON: Well, maybe just a  
19 question. I'm looking at the response from the  
20 Applicant to the various conditions filed. And one  
21 of these was post-construction survey of three years,  
22 consistent with the recommendation of Public  
23 Counsel's expert witness in this regard. Stricter  
24 requirements placed if any threatened species are

[DELIBERATIONS]

1 killed. Applicant says -- response: Not acceptable.  
2 Proposed condition is unjustified and contradicts the  
3 recommendations of the New Hampshire Fish and Game  
4 Department, which has responsibility and authority to  
5 protect wildlife in New Hampshire. The Applicant has  
6 recommended that its commitments to Fish and Game  
7 relative to post-construction surveys and monitoring,  
8 which are spelled out in detail in its post-hearing  
9 brief, be included in certificate conditions.

10 So I guess the first thing I'd say is  
11 the three-year survey you seem to be saying is  
12 consistent to what was imposed on the Granite  
13 Reliable project. But in this case, does Fish and  
14 Game go along with what the Applicant is saying, or  
15 do they go along with the three years' survey?

16 DR. KENT: In their letter of  
17 March 21st, they're saying they're content with one  
18 year of rigorous mortality assessment and a lifetime  
19 of less rigorous assessment, as proposed by  
20 Iberdrola.

21 MR. HARRINGTON: So this is correct  
22 then; New Hampshire Fish and Game does agree with the  
23 position of the Applicant.

24 DR. KENT: Does agree -- Fish and Game

[DELIBERATIONS]

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1 and the Applicant are in agreement about how to do  
2 bird and bat -- avian and bat monitoring, yes.

3 MR. HARRINGTON: Thank you.

4 DR. KENT: Oh, that's a different  
5 issue. Do you want to tackle that one now?

6 MR. HARRINGTON: I'm okay. If that's  
7 different, I'm confused why it's different.

8 CHAIRMAN GETZ: Well, let me see if I  
9 can formulate it. There's a -- you have to go back  
10 to what's the standard. The Applicant has to  
11 demonstrate that there will be no unreasonable  
12 adverse effect on the natural environment, one subset  
13 of natural environment being bats and birds. They  
14 have provided, I guess, Dr. Kent, what you would  
15 characterize as some generalized testimony based on  
16 what's happened elsewhere and transposed it to Groton  
17 to say it looks like there's going to be no  
18 unreasonable adverse effect. And Dr. Kent is raising  
19 the issue of is that a valid approach. What these  
20 other -- a lot of what these post-construction  
21 mortality studies go to is the issue of if something  
22 happens after the fact, then -- it's really a  
23 protection or a condition that, if there are some  
24 negative effects, that there will be some kind of

[DELIBERATIONS]

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1 mitigation or some remedy, and I guess ultimately  
2 going to some restriction on operation of turbines in  
3 certain areas or at certain parts of the year. So I  
4 think that may be how do you make the first finding,  
5 and then what do you do in terms of linking that  
6 finding or decision to studies and remedies related  
7 to what you get out of those studies. I don't know  
8 if that --

9 MR. HARRINGTON: So we're --

10 CHAIRMAN GETZ: Wait, wait. Before we  
11 get there, I want to make sure. Am I characterizing  
12 fairly the issues that you're proposing?

13 DR. KENT: I don't want to try to read  
14 Fish and Game's mind. I can tell you with Granite  
15 Reliable, we settled on three years as a  
16 statistically valid length of time to make some  
17 determinations about what was going on. Now, one  
18 year --

19 CHAIRMAN GETZ: We're talking post.  
20 Pre or post?

21 DR. KENT: We're talking post now.  
22 Too late for pre.

23 If you do one year, the result could  
24 go anywhere. It could be, Hey, hardly anything died,

[DELIBERATIONS]

1 and you go, oh, that must be the way it's going to  
2 be. You know, the client's happy, the Applicant's  
3 happy because things look good. That first year  
4 could go very badly, and all of a sudden there's  
5 pressure on the Applicant to rip out some turbines or  
6 start buying conservation land or pay into a fund.  
7 Anything can happen in the first year, any one year  
8 of study.

9 So our thinking when we did Granite  
10 was let's get three years and start to look for a  
11 trend and start to get a sense of what's really going  
12 on. This has become increasingly important, as the  
13 client's consultant -- the Applicant's consultant  
14 helped us understand. We can't make any correlations  
15 between these pre-construction surveys and what's  
16 going to happen afterwards. We lost that  
17 predictability, in essence, which is ironic, because  
18 now we're looking at all of us trying to make that  
19 connection. And Fish and Game, in their newest  
20 guidelines, are trying to make that connection  
21 between the risk assessment, what happens up front  
22 and what's happening before. But the consultants in  
23 this testimony have said you can't make that  
24 connection.

[DELIBERATIONS]

1 MR. HARRINGTON: This gets back to  
2 that whole area that you just partake in these  
3 surveys. If you take them for one year  
4 pre-construction or 10 years pre-construction, then  
5 you see what happens after the project goes online.  
6 We've been shown by various projects that there's  
7 really -- you can't make a prediction based on that.

8 DR. KENT: Based on pre.

9 MR. HARRINGTON: Based on the pre.  
10 Right.

11 DR. KENT: That was the consultant's  
12 testimony.

13 MR. HARRINGTON: You don't know how  
14 it's going to work until they actually put them up  
15 there and start spinning the blades.

16 DR. KENT: Right. I personally  
17 believe there's a correlation there somewhere. But  
18 nobody's found it, apparently, and nobody's testified  
19 to it.

20 So we're dependent on what happens  
21 after construction, really, to figure out what the  
22 impact's going to be. So it becomes very important  
23 to get the right information to make that  
24 determination, whether you're the Applicant or the

[DELIBERATIONS]

1 Committee. You need good information to go forward.

2 CHAIRMAN GETZ: Dr. Boisvert.

3 MR. BOISVERT: I was listening to the  
4 testimony during the hearings regarding the avian  
5 impacts, and with some interest. What I see here is  
6 an attempt to understand a basis to establish linear  
7 trends over time, in terms of fatalities for birds  
8 and bats. One year of careful monitoring does not  
9 seem to be adequate to develop any sort of idea of  
10 what is average. You cannot average a single point.  
11 And can't draw a linear trend based on one point.  
12 You need more than that. Three years, I believe,  
13 would be much more appropriate because you would have  
14 more of an opportunity to sample variations, changes  
15 in climate, weather conditions -- climate being what  
16 you'd expect, weather being what you get. And that  
17 would give a much sounder basis to interpret whether  
18 or not the fatality of 50 bats in a year is high or  
19 low. And the whole point is to determine whether or  
20 not there needs to be any mitigation to lower the  
21 number of fatalities, should that be necessary.

22 As I understand, an indication would  
23 be turning off some of the turbines for certain  
24 periods of time, either at night or whatever, to



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1 lower the opportunity for impacts and so forth,  
2 whatever those mitigation treatments might be. I am  
3 not persuaded by the testimony that I heard that one  
4 year is sufficient to provide me with comfort that  
5 they have identified the true scope. And we need to  
6 have that in order to determine whether you're going  
7 to get mitigation efforts and what those efforts  
8 might be.

9 CHAIRMAN GETZ: Mr. Steltzer.

10 MR. STELTZER: In the Granite Reliable  
11 situation, on the number of years of  
12 post-construction study, was it New Hampshire Fish  
13 and Game's recommendation to have three years?

14 DR. KENT: Was it Fish and Game who  
15 made the request?

16 MR. STELTZER: What I'm trying to  
17 address here is, it's my understanding that, for the  
18 Granite Reliable project, it's a different site than  
19 what we're talking about here. And there were other  
20 mitigative measures that were taken to help mitigate  
21 the impact that was potentially to occur to the avian  
22 and bat species, specifically that there were some  
23 land conservation. So I'm trying to delineate Fish  
24 and Game's recommendations underneath their review

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1 for a project that they deemed possibly more  
2 pristine. Is it -- was that the case for Granite  
3 Reliable versus the project that we have before us,  
4 which is the Groton Wind project?

5 CHAIRMAN GETZ: Well, I think I  
6 understand what you're saying. Did the Fish and Game  
7 say this is the answer for Granite Ridge [sic], and  
8 it now has maybe a different answer for this project,  
9 and should we be according some kind of deference to  
10 them based on maybe they designed a specific answer  
11 to a specific set of circumstances? And I guess I  
12 haven't gone back through and haven't -- without  
13 looking at a record, know how the -- done a little  
14 more research to know how the condition evolved. And  
15 I'm not sure if Dr. Kent recalls, but...

16 (Discussion between members off the  
17 record.)

18 DR. KENT: Well, let me ask -- answer  
19 that the best I can, not being Fish and Game, but  
20 being there.

21 Fish and Game was most concerned about  
22 Martens and lynx in high-elevation corridors, and  
23 that was the primary basis for the mitigation deal  
24 that was struck before -- very early in the

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1 proceedings of this. I can't tell you who first  
2 proposed the three years. It might have been me.  
3 But I don't remember for sure. I don't think it  
4 was -- Director Normandeau was sitting on that  
5 committee, and I don't think he did. So it might  
6 have been me. But the issues at the time were lynx  
7 and Martens at high elevation.

8 MR. STELTZER: My understanding from  
9 that project as well was the sensitive habitat that  
10 it had in high elevations to birds, such as some of  
11 the different types of thrushes.

12 DR. KENT: I'm not sure the Bicknell  
13 came into play too much. There was a woodpecker,  
14 too. But I don't think either of those birds were --  
15 I don't think we spent a lot of time talking about  
16 either of those. I mean, that was part of the point  
17 for trading off for some high-elevation land  
18 elsewhere in the mitigation deal.

19 MR. STELTZER: And here's where I'm  
20 going with it: There's been some discussions about  
21 what is a migratory corridor. And I think it could  
22 be argued that the entire East Coast is a migratory  
23 corridor. And so I'm trying to figure out what is an  
24 appropriate amount of post-construction study that

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1 should be done on a project based off of a site and  
2 its uses. And maybe in the case of Granite Reliable  
3 and their project, since it was a more impact --  
4 there was a more pristine area which could  
5 potentially have greater impacts, you would want to  
6 have a longer period of study, but for the Groton  
7 project, where it is an active wood lot being used,  
8 that it might not be warranting the same level of  
9 study that is needing to be done.

10 DR. KENT: Granite actually wasn't all  
11 that pristine. The Phillips Brook area was pretty  
12 heavily logged, and badly logged. There had been  
13 logging above 2700 feet at high elevation as well,  
14 and that created some impetus to get a deal done and  
15 to limit logging, any more logging at that area.  
16 Certainly the elevation is higher. It changes the  
17 ecology. So it was particularly important to the  
18 resource agencies.

19 As to the mitigation corridors, I  
20 don't think that's accurate to say that all of the  
21 East Coast is a mitigation corridor. Birds typically  
22 follow particular routes. I mean, people make a good  
23 tourist trade out of knowing where the birds are  
24 going.

[DELIBERATIONS]

1                   We're talking about a ridgeline. We  
2 know there's migration. There's study -- the  
3 consultants have demonstrated that there's hundreds  
4 of raptors, hundreds, maybe more, thousands -- I  
5 forget the numbers of songbirds. I mean, birds are  
6 migrating over the project site.

7                   So I'm trying to help you get to the  
8 end of where you're really trying to get. Is this  
9 site less valuable than other sites, and should we  
10 cut it some slack because it's not as important? Is  
11 that what you're trying to sort out?

12                  MR. STELTZER: I don't know if I'd use  
13 those words exactly.

14                  DR. KENT: Sorry.

15                  MR. STELTZER: But I do think that the  
16 level of post-construction study should fit the site  
17 itself. My own sense is that there are some unique  
18 uses occurring here. Certainly peregrine falcons are  
19 noted as being nesting in close proximity, though  
20 outside of the study area itself. But there were --  
21 I believe there were four cases of them visiting this  
22 site during the study period.

23                  So what is that exact level? And I  
24 don't know if it's necessarily what Fish and Game and

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1 the Applicant have suggested, as far as being one  
2 year and then a continuous study. But I also don't  
3 know if it's so far as to suggest that it's a full  
4 three years that the draft document that U.S. Fish  
5 and Wildlife has proposed, which individuals have not  
6 yet commented on, whether that's adequate either.

7 CHAIRMAN GETZ: Mr. Scott.

8 MR. SCOTT: Maybe I can help -- or  
9 hurt. We'll see here.

10 First of all, you know, obviously I  
11 remember the Granite Reliable. Did I get that right?  
12 Granite Reliable Energy. The Noble Wind Farm.  
13 Obviously, you had the higher elevation aspects. But  
14 with that, of course, we had great involvement with  
15 the Appalachian Mountain Club and the Audubon  
16 Society. So it was very -- I think it was very --  
17 and Fish and Game, obviously. So it was very well  
18 vetted. But I don't remember the three years being  
19 necessarily because of that. But having said that,  
20 maybe the group can help me. I thought what one of  
21 the things -- and maybe it's in Day 4 testimony -- I  
22 thought one of the things that was being postulated  
23 was what's different about this project was they have  
24 as a company policy that they do this for the

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1 lifetime of the project, not necessarily to the same  
2 extent, but they have a plan that they move forward.  
3 Is that not correct, or is my memory not serving me  
4 right?

5 DR. KENT: Yes. They dropped down to  
6 informal, where the operation staff was trained to go  
7 out there and look for the birds, take a picture and  
8 write down what the species is.

9 MR. SCOTT: So, just to capture, the  
10 question I think is, is that therefore sufficient, or  
11 do we need three years and that; is that correct?

12 DR. KENT: I'm sorry. Repeat your  
13 question?

14 MR. SCOTT: So the question at hand  
15 is, I think is, is one year of more advanced  
16 post-construction surveys, and is that sufficient; or  
17 do we need to do three years plus that? Is that  
18 correct? Is that pretty much what we're discussing?

19 DR. KENT: What I'm representing is  
20 that you need the three years of rigorous study so  
21 you can determine what the trend is. Ultimately what  
22 we're trying to do is determine the impact,  
23 regardless of how sensitive this place is. We can't  
24 determine how sensitive it is until we know what the

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1 impact is. We can't do that with one year. And  
2 while I commend Iberdrola for having a long-term  
3 commitment, that informal monitoring does not lend  
4 itself to the same analysis, and hence, to reaching a  
5 conclusion about the impacts as that first year of  
6 monitoring.

7 And there's some -- you know, it's  
8 unfortunate I could only get the 2010 Lempster  
9 report. But there seemed to be some suggestion that  
10 the numbers differed from the first year. For  
11 example: There was one bat in the first year and 14  
12 in the second year. Now, that's quite a difference.  
13 So it be nice to see. Here we had a project at  
14 Lempster and we had two years of study. But that  
15 wasn't rep -- it would have been nice if that was  
16 brought forward to us as the Committee to see, oh, it  
17 doesn't make any difference how many years we do it,  
18 'cause the second year was the same as the first  
19 yeah. It could have gone, okay, no big deal. But we  
20 didn't get to see it for some reason. So now we're  
21 left going, well, what makes sense? Well, as  
22 scientists and statisticians, we know that one year's  
23 a joke; two years, not very good. Three years is the  
24 absolute minimum for trying to figure out what's



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1 going on out there. And that's where the three years  
2 comes from. And there are some sensitivities out  
3 here -- go ahead. Sorry.

4 CHAIRMAN GETZ: Mr. Dupee.

5 MR. DUPEE: Thank you, Mr. Chairman.

6 I have to harken back to when I was a  
7 younger fish biologist at Fish and Game, like a  
8 century. But I did a fair amount of work in graduate  
9 school on quantitative ecology. And the point being  
10 made here I think is a good one. It's the amount of  
11 variation and the population you're looking at  
12 determines how many samples you need to take.

13 So if Steve has a pool of fish,  
14 each -- 5,000 fish, and they're all five inches long,  
15 he needs to sample exactly one of them to know all he  
16 needs to know about the length. If the fish in that  
17 pool vary in length substantially, he has to take a  
18 lot more samples to get an average length.

19 So, going on to our bird population,  
20 you pointed out, Dr. Kent, that in any one year we  
21 saw an order or magnitude variation. I think it was  
22 1 to 14 bats. And that doesn't surprise me a bit.  
23 It wouldn't surprise me 1 to 114 or 1014. So I think  
24 the three years -- it could be, you know, many more

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1 years than that to really know. You need a variance  
2 and then go back and calculate your sample size. Not  
3 to get technical, but that's what you'd have to do.

4 So I think the better motion here  
5 might be the random survey or a survey we heard the  
6 Applicant talk about. And I like that for several  
7 reasons: One, we're not ever going to be able to  
8 compare this site quantitatively to any other site  
9 for the reasons kind of alluded to way back when.  
10 They're all unique. There's too many variables to  
11 control. So we can control by looking at this site  
12 and comparing it to itself over a period of time. So  
13 by having a longer term monitoring strategy in place,  
14 and it could be -- this Committee could make it more  
15 rigorous than simply walk a straight line and stop  
16 and take a picture. We could do more of that if we  
17 wished. But it would be nice to truly have a longer  
18 term sample length to better understand populations  
19 moving around that facility.

20 The second thing I'd mention, Dr.  
21 Kent, is when I was a young man, there were no turkey  
22 vultures in New Hampshire. But we have them here  
23 now. And so if we were to simply rely on three  
24 years' worth of sampling back in 1963, we'd be

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1 missing potential species at risk. So again, I think  
2 that a longer term series of monitoring may better  
3 serve the Committee to understand the potential  
4 mortality resulting from facility on avian and bat  
5 populations in that facility, or any other facilities  
6 we chose to study.

7 CHAIRMAN GETZ: Mr. Harrington.

8 MR. HARRINGTON: Yeah, I just -- I  
9 think that Mr. Steltzer raised a good point here,  
10 because we do seem to have a difference. I'd like to  
11 know what the Fish and Game did recommend in the  
12 Granite Ridge case -- the Granite Reliable case. But  
13 as Mr. Iacopino pointed out to me, Fish and Game in  
14 this case, on November 5th, in their letter said --  
15 "Final Report and Recommendation for Groton Wind."  
16 It states, "However, the Department does recommend  
17 that the Applicant implement a post-construction bird  
18 mortality study designed by a consultant and reviewed  
19 and approved by New Hampshire Fish and Game. The  
20 studies should be conducted for three years, with  
21 full reports produced after each complete year.

22 Apparently, from that time in November  
23 until some -- I'm not exactly sure when, but sometime  
24 prior to now, Fish and Game changed their position

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1 and decided that the proposal of the Applicant, which  
2 was the one-year study and then this continuous thing  
3 that's already been described that could go on after  
4 that, was acceptable, and I guess better than the  
5 three-year study. So I'd like to see more  
6 information, if it's available at all in the record,  
7 as to -- I don't know where to find it -- as to what  
8 document did they actually their change their mind  
9 in, and did they give any reason for saying we accept  
10 this in lieu of the three-year study which we  
11 previously had requested. 'Cause they changed their  
12 minds. Fish and Game changed positions on this.

13 CHAIRMAN GETZ: Well, we have a  
14 letter. I think Dr. Kent --

15 DR. KENT: March 21st.

16 CHAIRMAN GETZ: The 21st of March  
17 explains where they ended up. Now, I don't know if  
18 in that letter it explains the rationale for how they  
19 got there.

20 DR. KENT: They met with Iberdrola and  
21 its consultant and talked about it.

22 MR. IACOPINO: Mr. Chairman, just for  
23 the record, the first Fish and Game letter, dated  
24 November 5th, 2010 that Mr. Harrington referenced is

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1 Applicant's Exhibit 50, and the March 21, 2011 letter  
2 from Fish and Game is Exhibit 72, I believe.  
3 Applicant's Exhibit 72.

4 The other thing I would point out for  
5 this Committee, although I don't think it answers the  
6 question as has been posed, in the Granite Reliable  
7 docket, Fish and Game actually intervened as a party.  
8 They did not in Lempster or in this particular docket  
9 we're considering today.

10 DR. KENT: Excuse me. It is  
11 confusing. I'm just putting things on the table, and  
12 the Committee can make up its mind, of course.

13 You know, Fish and Game changed it's  
14 mind after meeting with the consultant. That's their  
15 right. Trevor Lloyd recommended three. The  
16 committee came up with three before. Fish and Game,  
17 in this new guidance, recommends two to five,  
18 depending on the severity of the risk. And, you  
19 know, even though this is a draft document, it's had  
20 a lot of hands in it. So it was actually a document  
21 that developed out of a previous committee that  
22 brought in people from all over the place, all kinds  
23 of people. Just brought them together, and that's  
24 what produced this document. So it's not something

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1 somebody threw together and is waiting for feedback.  
2 Fish and Game now -- Fish and Wildlife Service in the  
3 Concord office has also been recommending three years  
4 on these projects. And to my knowledge, they haven't  
5 changed their opinion. So there's a lot of push  
6 behind the three years. But the point is we're  
7 supposed to try to figure out what the risk is and  
8 what the impacts would be. And so we have to come up  
9 with a way to do that. And we could just defer to  
10 the new opinion of the Fish and Game and leave it at  
11 that, and we can enter their March letter and assume  
12 that they know better than we do, or we can think for  
13 ourselves about what's necessary to determine level  
14 of risk and level of impact -- determine level of  
15 impact.

16 MR. IACOPINO: Mr. Chairman, Dr.  
17 Kent's made several references to Fish and Game and  
18 the draft guidelines. I believe you mean U.S. Fish  
19 and Wildlife, those guidelines. Is that --

20 DR. KENT: Yes. Did I call it Fish  
21 and Game?

22 MR. IACOPINO: Yes. And they are set  
23 forth in the record at Counsel for the Public  
24 Exhibits 21, 22, 23 and 24. And that's both -- with

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1 each exhibit is a Federal Register publication that  
2 contains the reference to the guidelines. And then  
3 the guidelines as a whole are Public Counsel 22 and  
4 Public Counsel 24. And that's the U.S. Fish and  
5 Wildlife Service Draft Land-based Wind Energy  
6 Guidelines and the U.S. Fish and Wildlife Service  
7 Draft Eagle Conservation Plan Guidance. And both of  
8 those, I think, came out in January of 2011.

9 DR. KENT: I don't know at what point  
10 you want me to make this last confusing addition here  
11 to this discussion, and then I'm probably going to  
12 just be quiet and let it play out.

13 Even with the mortality surveys,  
14 whether you do three years or you do one year and  
15 then you change it to informal, no matter what you  
16 do, you still need to establish context. You don't  
17 know -- you know, like if I get 100 birds dead, I  
18 don't know whether that's a lot or a little unless I  
19 know what the population is that I'm drawing from.  
20 So, to actually be able to determine what kind of  
21 impact we're making, you need to have breeding bird  
22 surveys, raptor surveys, nocturnal migrating bird  
23 surveys and bat surveys, so you have some idea of the  
24 population. And then, when you do your mortality,

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1           you know what that number is relative to the pool of  
2           what could die. And now that I've thrown that on the  
3           table, I'll just leave it there.

4                       CHAIRMAN GETZ: If you could clarify  
5           one thing for me. When you talk about three years of  
6           post-construction mortality studies, as I understand  
7           was the condition in Granite Reliable, those weren't  
8           necessarily the first three years. That could be,  
9           like, years one, three and five. Is that how that  
10          played out there?

11                      DR. KENT: That's how we did it in  
12          Granite, yes.

13                      CHAIRMAN GETZ: And so what you're  
14          opposing really is -- I think in your summary there  
15          was the way it was done in Granite and there's the  
16          way it's proposed here. The way it was done in  
17          Granite had three separate years, years one, three  
18          and five, of intensive post-construction mortality  
19          studies. And, you know, for all intents and  
20          purposes, after that, there's not a lot of real close  
21          study. What's been proposed here is a single year of  
22          intense post-construction mortality study and then a  
23          much more extended, lighter review. Is that a  
24          fair --



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1 DR. KENT: Less interpretable numbers  
2 is the way to characterize it. But there's a  
3 mistake -- just to correct you. In Granite Reliable,  
4 we weren't that clean. We talked about  
5 post-construction bird and bat mortality for three  
6 consecutive years and breeding bird surveys in years  
7 one, three and five. So we broke it up, for better  
8 or worse.

9 CHAIRMAN GETZ: So, then, I guess your  
10 position is, between those two, if those were our  
11 only two options, what was done in Granite Reliable  
12 and what's been proposed here by the Applicant, and  
13 agreed to by Fish and Game, you think the better  
14 approach is the Granite Reliable.

15 DR. KENT: No. I think we've probably  
16 gotten smarter since then. And I think in a perfect  
17 world I would tell you what we should do for three  
18 years is breeding bird surveys, raptor surveys,  
19 migrating bird surveys, bat surveys, and the bird and  
20 bat mortality surveys. That would give us all the  
21 information we need to determine what in fact we're  
22 actually having. And the way we structured it in  
23 Granite is at the end of that time we all look at it  
24 and go, hey, things are fine. We're not wiping out

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1 every bird in the area. We're not wiping out every  
2 bat in the area. We haven't wiped out the  
3 peregrines. The Applicant could go along running its  
4 windmills. We don't have to worry about it. Or,  
5 jeez, what a mess we're making. Let's figure out  
6 some way to mitigate the impact we're having. But  
7 the important thing is we can learn from what we did  
8 last time. We need to tie the mortality surveys to  
9 the other surveys so that we know what percentage of  
10 that population we're drawing down, if we are drawing  
11 down from it.

12 CHAIRMAN GETZ: Dr. Boisvert.

13 MR. BOISVERT: To add another  
14 dimension to this, in addition to my comments about  
15 basically sampling adequacy, which is what we're  
16 talking about, is three better than one, then we can  
17 talk about also who is doing the sampling, you know,  
18 hired trained professionals looking at it, their  
19 results should be more comparable year to year.  
20 However, there's another aspect; and that is, in the  
21 real world we're sitting in right now, information  
22 from previous projects are brought forward to guide  
23 us to current and future projects, which is to say  
24 information from Lempster was used to help predict

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1 what might be expected at Groton Wind. And I can  
2 fully expect that information from Groton Wind will  
3 then be cited in future hearings and in future  
4 studies to guide decisions for those future  
5 determinations.

6 In listening to public hearings held  
7 by this Committee, and hearings here in this  
8 building, frequent reference was made to what was  
9 done in Lempster. We've referred to what was done  
10 Lempster, using that as a guide. I say that the  
11 avian and bat studies for Groton Wind will be used in  
12 reference to other future projects, and I would feel  
13 much better if it's on the basis of three years'  
14 worth of study than one. The quality of the data  
15 will be far higher. Insofar as these renewable wind  
16 projects are relatively new to New Hampshire, we have  
17 rather few in this state compared to other parts of  
18 the country, we are probably well advised to be more  
19 careful at the front in gathering this data because  
20 it will be relied upon more heavily in the near  
21 future. I think that's a reasonable expectation.  
22 And so I see this as an aspect that we need to pay  
23 attention to.

24 The Applicant has 40 projects in the

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1 United States, as I understand it. We can anticipate  
2 they would have more in New Hampshire and in the  
3 country. They will be using the data on their own  
4 projects. I think we will all be better served if we  
5 have higher quality data. The greater number of  
6 years and higher quality personnel doing the job --  
7 not to say the operational staff won't do a good  
8 job -- but the comparability to statistically say  
9 with some certainty what the trends are would be much  
10 greater with a higher quality collection. So I think  
11 that's a consideration we need to hold.

12 CHAIRMAN GETZ: Anyone else?

13 MR. PERRY: Well, I'll just, you know,  
14 voice my support for more rigorous post-construction  
15 assessments based on the fact that no link has been  
16 made between pre and post. I mean, if there was a  
17 good link between pre and post, you might be able to  
18 live with a little less rigorous. But even the  
19 Applicant's expert witness indicated that there was  
20 no link. And, again, one year's worth of intensive  
21 study and then going to a much less informal really  
22 doesn't give you the type of information that you  
23 need to make a determination whether -- what your  
24 trends are going to be. And I guess I should be more

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1 familiar with the pre-studies. But only one year of  
2 pre-study, or were there multiple years of pre-study?  
3 And if it was multiple years of pre-study, why was  
4 there multiple years of pre? Why wasn't it only one?  
5 If it's good enough for post, why isn't it good  
6 enough for pre?

7 MR. HARRINGTON: I think the  
8 pre-construction was a one-year study in two  
9 different seasons, wasn't it? Or multiple years?

10 DR. KENT: Multiple years. Multiple  
11 studies, multiple years.

12 CHAIRMAN GETZ: Mr. Harrington.

13 MR. HARRINGTON: Mr. Iacopino informs  
14 me we don't have -- I know I have not read the  
15 document that's cited here in Exhibit 72, the Fish  
16 and Game letter dated March 21st. It says the  
17 Department has agreed to post-construction studies  
18 outlined in RII [sic] Avian and Bat Protection Plan,  
19 the ABPP, protocols and concurs with the information  
20 submitted by Iberdrola to the SEC as a memorandum  
21 dated December 22nd, 2010. And we don't have that  
22 actual Avian and Bat Protection Plan?

23 DR. KENT: Yeah.

24 MR. IACOPINO: We have the Avian and

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1 Bat Protection Plan. There's a memo dated -- was it  
2 the December 20th?

3 MR. HARRINGTON: December 22nd.

4 MR. IACOPINO: December 22nd, 2010.

5 The very next exhibit is a Heritage Bureau memo dated  
6 that date, and that's Exhibit 72. I believe -- and I  
7 don't have the transcript reference. But I believe  
8 that Ms. Rendall said that that was the memo that  
9 they were talking about. But it does not seem to be  
10 the memo that -- I mean, it identified species, but  
11 that's all it does.

12 CHAIRMAN GETZ: Yeah, I think the  
13 Avian Bat and Protection Plan is in Volume 3 of the  
14 Application. So we have that.

15 MR. IACOPINO: We had that early on.  
16 We had that well before December.

17 MR. HARRINGTON: Okay. I'm trying to  
18 get the chronology here in my head. We had that well  
19 before December. But Fish and Game stated in  
20 November that they wanted three years' worth of  
21 studies, and then there was some meetings I guess  
22 that took place in December. As a result of those  
23 meetings, Fish and Game decided what was in that  
24 Avian and Bat Protection Plan was sufficient to

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1 address their concerns. So I guess I'm just hesitant  
2 to arbitrarily say, well -- I mean, they're the  
3 experts at this. They negotiated this with the  
4 Applicant. As far as I can see, they get, you know,  
5 nothing specifically out of it. They have no reason  
6 to not do what they think is the right thing to do.  
7 And they've concluded that's acceptable. I'm just a  
8 little leery about them saying, well, we have the  
9 Applicant with Fish and Game. They come up with an  
10 agreement that was acceptable to both parties, and  
11 then the Committee's going to say, well, yeah, but we  
12 don't think that's good enough. We want you to do a  
13 bunch more. I mean, I know we've done something like  
14 that in the past. I'm just a little leery on this  
15 one, not being an expert at all in birds or bats at  
16 all. But I don't know. I just think we have to give  
17 careful consideration before we're going to do that.  
18 If for nothing else, it sends a signal I think to the  
19 future: Don't waste your time negotiating with state  
20 agencies to try to work these things out in advance  
21 because they really don't mean anything when you get  
22 to the Committee.

23 CHAIRMAN GETZ: Well, I think some of  
24 what you're saying goes to the issue that Mr.

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1 Steltzer raised. And there is a very significant  
2 difference -- there are several significant  
3 differences between this case and how -- and what  
4 Fish and Game's role has been and what the role of  
5 other agencies are. Fish and Game took a different  
6 position in Lempster than it's done here. We don't  
7 really know what the rationale is, and they weren't a  
8 party and aren't here to explain that. Fish and Game  
9 doesn't issue a permit like DES does. So there's  
10 less of a, I guess I would call it a binding effect.  
11 But it's still up to us to make a decision. Even  
12 with DES, we could require more than they require.  
13 We could require more or different or less than Fish  
14 and Game proposes. I think we had to have a record  
15 and some arguments that, on the one hand, the  
16 Applicant is saying we have this really good approach  
17 now, this Avian and Bat Protection Plan. You know,  
18 we take a close look for one year, and if things  
19 don't work out so well, we'll take a closer look for  
20 another year, but we're going to be around for a long  
21 time, as opposed to what was done in Granite. And I  
22 think the issue of what Mr. -- or Dr. Kent is  
23 proposing, well, you really need the three good  
24 strong years. We're not held to either one or the



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1 other. I guess we have to make a judgment between  
2 one or the other, and which position we find most  
3 credible. And in fashioning conditions, we could --  
4 you know, there may be pieces of the Avian and Bat  
5 Protection Plan that we would want to keep, or there  
6 may be pieces of the other we could use from Granite  
7 Reliable. So I think we have a wide range of  
8 latitude in fashioning what the conditions are. But  
9 I guess you may be going back to the fundamental  
10 question of how much do I defer to the Fish and Game  
11 letter.

12 MR. HARRINGTON: Well, specifically in  
13 this case, because it wasn't as if Fish and Game --  
14 came in and said we've looked at this bat plan and we  
15 think it's good or acceptable or whatever. But they  
16 specifically come in and said we think you need three  
17 years of post-construction studies. And then they  
18 met with the Applicant, reviewed the Applicant's  
19 program and came up with a conclusion: This is good  
20 enough. We don't need three years. We can use their  
21 one year, and whatever you want to call the rest of  
22 this stuff. So I think it's different from me  
23 saying, you know, DES or somebody has issued  
24 something and says their plan meets the requirements

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1 of law. We look at it and say, well, in this case,  
2 maybe we need to go a little higher. This is a  
3 situation where an agency said we want the three  
4 years. Then they met with the Applicant, looked at  
5 the Applicant's program and said, oops, with this  
6 program we can change our mind. This is good enough  
7 that we don't need three years. And that's kind of  
8 the part that's got me hung up.

9 CHAIRMAN GETZ: Mr. Iacopino.

10 MR. IACOPINO: Mr. Chairman, if I  
11 could point out, it's been pointed out to me that in  
12 the record at Exhibit 62, which is Mr. Cherian's  
13 third supplemental prefiled testimony, attached to  
14 that is a memorandum dated December 22nd from  
15 Carol -- to Carol Henderson, John Cantor and Scarlett  
16 Philibosian at New Hampshire Fish and Game from  
17 Kristen Goland. And it does address IRI's commitment  
18 to Groton post-construction studies.

19 If you are contemplating taking a  
20 break to give the reporter a break, this might be a  
21 good time to do that, so everybody can find this and  
22 maybe look at it and can put everybody on the same  
23 page with respect to what you're deliberating.

24 CHAIRMAN GETZ: So that's the package

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1 filed on December 30th, 2010?

2 MR. IACOPINO: Yes. It was filed --  
3 yes. It's dated -- it's Edward Cherian's third  
4 supplemental prefiled testimony, dated December 30th,  
5 2010. And attached to the actual testimony, there  
6 are some photographs. And following the photographs  
7 is a Iberdrola Renewables memorandum.

8 CHAIRMAN GETZ: Okay. Well, I found  
9 it. I think that's probably a good recommendation.  
10 Does everybody have that? Any questions about it?  
11 Well, let's take a brief recess and everybody can  
12 take a look at that testimony. Might be helpful for  
13 the discussion. Take about 10 minutes.

14 (Whereupon a recess was taken at 3:10  
15 p.m. and the hearing resumed at 3:32 p.m.)

16 CHAIRMAN GETZ: Okay. We're back on  
17 the record in deliberations. And I think when we  
18 broke, counsel directed everyone's attention to the  
19 attachment to Mr. Cherian's testimony from  
20 December 30. So if everybody's had a chance to look  
21 at that, Dr. Kent, did you have any comment on that  
22 particular document?

23 DR. KENT: No. I've seen that  
24 document before. Thank you.

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1 CHAIRMAN GETZ: Well, let's just go  
2 back then to other discussions. Mr. Steltzer.

3 MR. STELTZER: What I'm trying to sort  
4 through as well is just the timeline of when  
5 documents were released and kind of the thought  
6 process.

7 So in Public Counsel's Exhibit 14, we  
8 have a copy of the Wind Turbine Guidelines Advisory  
9 Committee. That's dated the 4th of March, 2010. And  
10 that was largely -- it's my understanding that this  
11 document here, PC 14, was largely the document that  
12 was used by Fish and Wildlife, U.S. Fish and  
13 Wildlife, to put out their draft recommendations in  
14 Public Counsel's Exhibit 22, which was released from  
15 the Federal Register -- what was that date -- the  
16 18th of February, 2011. And then we have the Avian  
17 and Bat Protection Plan which was released in 2008.

18 So I guess where my head's going with  
19 this is that certainly I feel like I put a greater  
20 sense of weight on the Wind Turbine Guidelines  
21 Advisory Committee Recommendation, PC 14. And they  
22 certainly have gone through this tiered approach  
23 that's similar, though my understanding it's a little  
24 different from what U.S. Fish and Wildlife released.

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1 But they go through this tiered approach to determine  
2 what level of study should be conducted on the site,  
3 as opposed to applying a unilateral, you know, time  
4 frame for post-construction studies to be done every  
5 time. And I guess it's a little unfortunate that we  
6 haven't had any sort of testimony provided to us  
7 about this site and how it would apply to the Wind  
8 Turbine Guidelines Advisory Committee on tiers. We  
9 certainly had some opinions in March between Public  
10 Counsel as they were questioning Mr. Gravel on the  
11 U.S. Fish and Wildlife's recommendations from  
12 March -- excuse me -- from February in Exhibit PC 22,  
13 but not necessarily from PC 14. And it is noted on  
14 PC 14, Page 48. That's where it notes the tiered  
15 structured and how many years of post-monitoring  
16 should occur and whether this project falls  
17 underneath the criteria of two or more. You know, it  
18 certainly does say more, so you could go more than  
19 that. But it also does start at the minimum of two.  
20 Whether this is helpful or not -- but that's just  
21 kind of what I'm grappling with. I don't feel like I  
22 have a firm sense of where this project necessarily  
23 falls on this tiered structure from the Wind Turbine  
24 Guidelines Advisory Committee.

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1                   CHAIRMAN GETZ:  Remind me of what --  
2                   does that apply to birds, bats, both, more than  
3                   avian?

4                   MR. STELTZER:  My understanding is  
5                   that it does apply to both avian and bats.

6                   CHAIRMAN GETZ:  Any other discussion?  
7                   Mr. Perry.

8                   MR. PERRY:  Well, I'm again looking at  
9                   the December 22nd memo to folks at Fish and Game from  
10                  an individual at IRA -- IRI.  And it talks about  
11                  baseline monitoring is proposed to begin the first  
12                  year after commercial operations.  It will provide a  
13                  baseline mortality rate that IRA -- IRI, New  
14                  Hampshire Fish and Game and the U.S. Fish and  
15                  Wildlife Service can use to determine whether  
16                  estimated impact levels for the project are within  
17                  ranges for northern forested ridgelines.

18                  Now, if you're looking at the rate  
19                  from one year's worth of study to make an estimate,  
20                  it seems like your range, plus or minus, whatever  
21                  that estimate is, is going to be fairly large.  And  
22                  the more years you have involved, you should be able  
23                  to tighten that plus and minus range because your  
24                  sample size is a little bit higher.  And so if the

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1 monitoring information is being used to determine a  
2 rate that's then going to be used to make an  
3 estimate, it just seems hard for me to fathom using  
4 one year versus multiple years in order to be in a  
5 better position to defend whether there's an impact  
6 or not.

7 A second point that I see in this  
8 memo, on that first side it says "to determine  
9 whether estimated impact levels for the project are  
10 within ranges for northern forested ridge lines."  
11 I'm not sure I've heard any ranges presented as  
12 testimony, but it may be in testimony somewhere.

13 But on the -- in the same memo, on the  
14 second to the last paragraph it says that, should  
15 mortality rates exceed the most current established  
16 threshold ranges on northern forested ridge lines --  
17 and again, I've never heard any mention about what  
18 that threshold range would be. So I guess I'm a  
19 little confused as to actually what triggers some  
20 sort of responding action unless those ranges are  
21 known by someone. I mean, it hasn't been actually  
22 offered to the Committee as to what those consist of.  
23 So, just a little bit of discrepancy in terms being  
24 used. In one case it's comparing the findings from

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1 other wind projects that are sited in a similar-type  
2 habitat. And then there's some sort of mention of a  
3 threshold figure, which means if it exceeds a certain  
4 minimum, then it's going to automatically trigger  
5 something. And I'm not clear in my mind what that  
6 trigger is.

7 CHAIRMAN GETZ: Let me, I guess,  
8 observe this: In some of these other issues it was  
9 kind of clear where I thought the sense of the  
10 Committee was going. Here, it seems to be that  
11 there's at least two driving thoughts: One is a  
12 concern that one year doesn't provide sufficient data  
13 to make a judgment; the other is, should we give some  
14 weight to Fish and Game because of the position they  
15 took and what they're doing. And that seems to be  
16 kind of two different ways of approaching the  
17 decision process. But this all goes to the issue of  
18 what's the post-construction mortality studies, how  
19 those are conducted. I mean, are there other --  
20 putting that -- can we put that issue aside for one  
21 minute, just to -- I want to inquire, are there other  
22 concerns under the larger heading of Natural  
23 Environment, other areas? I don't know.

24 Maybe turn to you first, Dr. Kent, and



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1 give you the opportunity. But seems clearly there's  
2 a concern about how the post-construction mortality  
3 studies are done and conducted. And we need to make  
4 a decision about what kind of condition we would  
5 apply. But are there other areas where we're  
6 concerned that the project will have an unreasonable  
7 adverse effect on the environment, on the natural  
8 environment?

9 Mr. Steltzer.

10 MR. STELTZER: I don't believe so, at  
11 least from my sense and from my position. But one  
12 thing that I am interested in just flushing out a bit  
13 more is what happens with the data afterwards. And I  
14 think there's a --

15 CHAIRMAN GETZ: That's how we  
16 construct -- you mean the post-construction mortality  
17 studies and what happens with those?

18 MR. STELTZER: Yes.

19 CHAIRMAN GETZ: Can we hold off on  
20 that for a second? Because I want to make sure that  
21 we're -- because there's other issues of effect on  
22 habitat, effect on natural species, you know,  
23 endangered species, effect on wildlife. I mean, are  
24 there other -- I want to know what -- I want to try

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1 to get my arms around what's the full universe of  
2 things that we need to discuss and decide.

3 DR. KENT: Okay. No, it seems like  
4 this was the issue. There are endangered, threatened  
5 birds, but we captured it in the discussion of  
6 post-construction monitoring. They seem to have  
7 taken care of the brook trout. There were no  
8 significant impacts to communities. We don't seem  
9 like we're going to disrupt the moose and deer  
10 populations or any of the other wildlife to any  
11 significant amount. This was the central issue.

12 CHAIRMAN GETZ: All right. Well,  
13 then, Mr. Scott.

14 MR. SCOTT: In the interest of trying  
15 to maybe split the baby, for want of a worse analogy,  
16 is there a venue here perhaps to have a condition  
17 whereupon we clarify that, should Fish and Game feel  
18 uncomfortable with one year, whether before it starts  
19 the post-construction surveys or during it, to make  
20 it clear they can extend that up to three years, and  
21 that way we're kind of putting it on them if they --  
22 you know, they're the boots in the ground, so to  
23 speak. Is there a venue to do that, I wonder?  
24 Again, I'm trying to come up with a solution here

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1           that we can --

2                           CHAIRMAN GETZ:  As I understand it,  
3           they are supportive now of the approach that's under  
4           the -- that's one year.  But depending on what the  
5           results are in that one year, based on how it  
6           compares to some other metric, then you might have a  
7           second year.  So I think, you know, they're  
8           supportive of the approach under the Avian and Bat  
9           Protection Plan as it is at this point.  So I'm not  
10          sure that --

11                          MR. SCOTT:  It's more I'm just  
12          wondering if they feel somewhat of a constraint.  And  
13          again, if a condition could be that we make it clear  
14          to them in a condition that they have the authority  
15          to go up to three years, if that would be -- if that  
16          would help anybody's concerns I guess would be the  
17          question.

18                          MR. HARRINGTON:  Just a clarifying  
19          question?  What we're looking for -- or I guess  
20          what's being suggested here then is that we implement  
21          this, whatever it is, the avian/bats whatever  
22          program.

23                          CHAIRMAN GETZ:  The ABPP.

24                          MR. HARRINGTON:  Yeah, that's it.  But

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1 the difference being that instead of doing one year  
2 of intensive study, make the intensive study for  
3 three years and then continue with the rest of that  
4 program, commencing after the third year.

5 CHAIRMAN GETZ: Well, I think that's  
6 one possibility. But I'm not sure if that's -- if  
7 that would encompass all of what Dr. Kent --

8 MR. HARRINGTON: That's what I'm  
9 trying to find out. That was kind of a question  
10 directed to him.

11 DR. KENT: It could be. I'm more  
12 interested in the front end of this thing. I'm more  
13 focused at the moment on getting the right  
14 information early in the process.

15 MR. HARRINGTON: Pre-construction?

16 DR. KENT: No, no, no.  
17 Post-construction. Pre-construction's gone. It's  
18 not just the years of the monitoring at a certain  
19 level. It's understanding -- as Mr. Perry was  
20 discussing, having the context. It's really vague  
21 what the comparison is. The consultant talked about  
22 comparing it to other wind projects in the northeast  
23 in forested areas. Well, what are those? I'm not  
24 familiar with anything more than Lempster operating

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1 right now. Maybe one in Vermont. But I haven't seen  
2 the reports. We've never been offered the  
3 documentation. We don't know what kind of numbers  
4 we're talking about. Are we talking absolute  
5 numbers, like 100 birds is a lot, 10 is good? None  
6 of that stuff was ever presented to us. So the  
7 threshold here that's referred to, that's fundamental  
8 to the bat and avian --

9 MR. HARRINGTON: That thing.

10 DR. KENT: -- the ABPP, there's a  
11 vital piece of this that's not -- I don't understand,  
12 I'll say. I don't know what we anchor this to. So  
13 when I look at any post-construction study, I look at  
14 a way to anchor it to something. And to do that, you  
15 have to know what the population of birds and bats is  
16 that you're drawing from when you have mortality.  
17 And if I have 20 bats dead, I don't know whether to  
18 worry about that unless I know how many bats are  
19 coming through the area or live nearby. Same with  
20 birds. And that's missing, in my opinion. Whether  
21 we -- whether Iberdrola wants to continue having  
22 their operators go out and check for stuff, you know,  
23 honestly that's of less consequence to me, because  
24 there's not as much value to that if you can't peg it

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1 to something. You're not collecting in the same way  
2 you collect that first year in the proposal. First  
3 year is pretty rigorous, the mortality part of the  
4 survey. I like what I saw in the Lempster 2010. It  
5 was very nicely done. And if you could build a  
6 context around that, of how many birds and bats we  
7 had around that we were killing, that would be a  
8 great program. But when you do one year of something  
9 fairly rigorous mortality, but you're missing the  
10 context, and then the next year you go into -- I  
11 mean, I don't know how you make that decision to go  
12 to the next year and just have operators go out and  
13 pick up stuff -- or they're not picking up, actually,  
14 just recording it. What does that mean? How do you  
15 make any decisions about your impacts? It makes no  
16 sense. Did I answer your question at all?

17 MR. HARRINGTON: Yes.

18 CHAIRMAN GETZ: Dr. Boisvert.

19 MR. BOISVERT: If I could respond to  
20 Mr. Scott's comment. I think his proposal, while  
21 it's somewhat appealing, still leaves an awful lot of  
22 ambiguity. You get into just what is the trigger and  
23 so forth. And I think some sense of certainty is  
24 more desirable.

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1           The other thing is that Fish and Game, you know,  
2           for whatever reason, modified their position from  
3           three years to one. But it's not as though they  
4           would be opposed to three years. They just agreed as  
5           part of a package of other things to go to one. And  
6           I spoke earlier about the issues of sampling and so  
7           forth. This is what I do for a profession. I've  
8           done it for a long time. But I've also been involved  
9           in environmental review and compliance at a fairly  
10          high level. And it's axiomatic that the floor of  
11          acceptability to the reviewer is the ceiling of the  
12          containment for the Applicant. They're not going to  
13          do any more than they need to, than they have to.  
14          That's just the way it works.

15                 So I think we need to understand that as well.  
16                 And, you know, it's in their interest to limit the  
17                 amount that's done because of the cost. We  
18                 understand that. But I still come back to the far  
19                 more appropriate and useful for the three years. In  
20                 their own memo of December 22nd, they're referring  
21                 back to the protocols would be similar to those used  
22                 at Lempster Wind Farm. So the issue of establishing  
23                 some track record that would be used in the future I  
24                 think is relevant. And that doesn't mean that it

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1           couldn't be changed down to two years or one year for  
2           a future subcommittee looking at other renewables  
3           like this. But it does give us something to work  
4           from to speak from a position of informed knowledge.

5                         CHAIRMAN GETZ: Any other comments?

6           Mr. Steltzer.

7                         MR. STELTZER: Just throw out another  
8           potential. I don't know. A little different  
9           direction on a condition that the Committee could  
10          consider is that the Committee could require that the  
11          Applicant work with Fish and Game to go through the  
12          tier structure that has been outlined in the Wind  
13          Turbine Guidelines Advisory Committee in PC 14 and  
14          come to a determination on how many years of  
15          post-construction work should be done. Because what  
16          I do like about the Wind Turbine Guidelines Advisory  
17          Committee is that they are basing it site per site on  
18          what the effect might be. And so they're taking in  
19          site conditions and not just requiring a unilateral  
20          three years, no matter what the conditions are of the  
21          site, just so we can get the data to see what's  
22          actually happening there. And it's a little more  
23          customized based off of the existing conditions that  
24          are there.



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1                   CHAIRMAN GETZ: Well, I guess,  
2                   structurally, I have this concern about if we're  
3                   going to delegate something or have a second step  
4                   that gives some authority to Fish and Game, that we  
5                   need to feel comfortable that it's something they  
6                   want to exercise, you know, especially if the  
7                   majority of the Committee has a concern about  
8                   whether what they would want to do is what is  
9                   consistent with what the Committee feels is  
10                  necessary. So I think that's -- which gets back to  
11                  that fundamental question we've been addressing,  
12                  which is whether to give weight to their assent or to  
13                  require something more hard and fast in the  
14                  condition.

15                         How about if I just ask this question,  
16                         not as a vote or anything, but just to try to get a  
17                         sense of the Committee: I mean, how many members are  
18                         persuaded that there needs to be more than one full  
19                         year of post-construction studies, similar to what  
20                         has been conducted at Lempster? If folks could just  
21                         raise their hands to try and get an idea of how many  
22                         would require more than one year.

23                                 (Multiple members raise hands.)

24                         CHAIRMAN GETZ: Well, seems like

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1 that's a pretty strong consensus then. It's  
2 something more than what the Applicant is proposing  
3 and what Fish and Game has found is minimally  
4 reasonable. So I guess we need to go from there.

5 I guess I'd have to turn back to you  
6 then, Dr. Kent. I mean, do you have a motion, a  
7 specific motion, I guess in general, with respect to  
8 a position we should take on whether there's an  
9 unreasonable adverse effect, and then linking that to  
10 a condition with respect to, you know,  
11 post-construction studies?

12 DR. KENT: Yes, I could at least give  
13 you an outline for one if you'd like it.

14 CHAIRMAN GETZ: Okay. An outline?

15 DR. KENT: This would be my motion, if  
16 we're done discussing. Are we done discussing?

17 CHAIRMAN GETZ: Well, there's plenty  
18 of time for discussion. I guess we need to know what  
19 you're proposing. When I say "plenty of time for  
20 discussing," subject to -- I think we intend to close  
21 by 5:00 today and resume at 9:00 tomorrow.

22 DR. KENT: For the purpose of  
23 determining impacts or lack of impacts from this  
24 project to birds and bats, what I would propose is a

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1 breeding bird survey three years post-construction,  
2 replicating the techniques used by Stantec during  
3 pre-construction, with the involvement of Fish and  
4 Game, and Fish and Wildlife Service; diurnal raptor  
5 surveys, spring and fall, for three years,  
6 replicating the 2009 Stantec survey; summer and early  
7 fall peregrine falcon surveys in the first  
8 post-construction year; nocturnal migrating bird  
9 surveys three years post-construction, spring and  
10 fall; bat surveys, consisting of acoustic surveys,  
11 three years post-construction, in the original four  
12 acoustic survey sites that were used, summer and  
13 fall, to characterize resident and migratory  
14 populations; bird and bat mortality surveys three  
15 years post-construction, replicate or improve on the  
16 study design used by West, Incorporated at Lempster  
17 in the 2010 work; two bird and bat mortality surveys  
18 should be scheduled to temporally coincide with the  
19 breeding bird surveys, diurnal raptor surveys, the  
20 nocturnal migrating bird surveys and bat surveys, to  
21 the extent possible to allow comparison; and then a  
22 discussion with -- an annual discussion with Fish and  
23 Game, and Fish and Wildlife Service, starting with an  
24 annual report about how things are going, whether to

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1 proceed as it is or we seem to have our answers, and  
2 also providing a venue for talking about any  
3 mitigative measures that be necessary. And this last  
4 point, honestly, I'm indifferent. The Applicant can  
5 continue the operational monitoring as described in  
6 Iberdrola's bird and bat protection plan for the life  
7 of the operation if they so choose.

8 CHAIRMAN GETZ: Well, let me ask this:  
9 Clearly, there's a difference, a time difference,  
10 rather than one year to three years. But are there  
11 categorical differences? I mean, what are the  
12 categorical differences -- meaning, are there some  
13 things in your list that are not included, such as  
14 the diurnal raptors or -- what was the -- if you  
15 could lay that out, that would be helpful.

16 DR. KENT: Yeah. I'm just checking to  
17 see. Fish and Game asked for something that they...

18 (Pause in proceedings)

19 DR. KENT: Yeah. Iberdrola starts  
20 with mortality surveys. They were going to -- which  
21 they both have. Theirs were going to be one year.  
22 But I think we're pretty much on the same page when  
23 it comes to methods. They were also going to commit  
24 to a bat acoustic detection monitoring during the

1 first year, and I'm suggesting three years.

2 The different items, as you referred  
3 to them, the additional items are breeding bird  
4 surveys, the diurnal raptor survey, nocturnal  
5 migrating bird surveys. And the purpose of those is  
6 so that we can have a context to evaluate the  
7 mortality study results. Without those surveys, we  
8 simply don't know what it means when we find dead  
9 stuff.

10 CHAIRMAN GETZ: So then, what's  
11 actually different, in terms of what the field people  
12 pick up when they go out to do their surveys? I  
13 mean, how -- I'm trying to get a feel for what's  
14 different and what more is required, what more is  
15 done.

16 DR. KENT: For the breeding bird  
17 survey, they're out there watching with binoculars;  
18 for diurnal raptor survey, binoculars; nocturnal  
19 migrating bird surveys, they're using radars. All of  
20 the stuff they did pre-construction, all part of the  
21 pre-construction work.

22 CHAIRMAN GETZ: Okay. So none of  
23 that, really, in terms of methodology, is different.

24 DR. KENT: No. Most of their

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1 pre-construction stuff, their methods were pretty  
2 good. We just start to fall down when we start to  
3 make interpretations and extrapolations to mean --

4 CHAIRMAN GETZ: And then the mortality  
5 studies are essentially the same.

6 DR. KENT: Same, for 2010. I haven't  
7 seen the 2009, but I'm sure that's -- I would be  
8 stunned if it wasn't the same as the 2010. But it  
9 was a nice piece of work.

10 MR. HARRINGTON: Question.

11 CHAIRMAN GETZ: Mr. Harrington.

12 MR. HARRINGTON: So I'm looking back  
13 at the letter from Fish and Game to Mr. Iacopino on  
14 November 5th. And it goes over there and says, Given  
15 all these concerns, measures to thoroughly and  
16 accurately document the effect of Groton Wind Energy  
17 on bat activity --

18 (Court Reporter interjects.)

19 MR. HARRINGTON: In the event that the  
20 project is approved, the Department suggests the  
21 following continuation of bat -- of monitoring bat  
22 activity, as well as the addition of documenting wind  
23 energy-related bat mortality. Observing these  
24 suggestions will advance information for the causes

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1 for and reduction of bat mortality. And it says --  
2 I'm not going to read this whole thing.

3 It says, I, recommended survey  
4 activities, and then there's three bullets under  
5 that; recommended mortality surveys, and there's two  
6 bullets under that. And then it goes on to say that  
7 this should be conducted for three years, the  
8 mortality one.

9 You're suggesting that something  
10 beyond what's in this original November 5th memo, if  
11 I'm reading correctly.

12 DR. KENT: I have to find the  
13 November 5th. So hold on. Sorry. Exhibit number?

14 MR. IACOPINO: What exhibit?

15 MR. HARRINGTON: Yeah, it's Exhibit  
16 No. 50. I guess Applicant's 50.

17 MR. IACOPINO: Applicant's.

18 DR. KENT: Yeah.

19 MR. HARRINGTON: I just want to -- I'm  
20 trying to determine if it's just the difference  
21 between they originally said three years and now  
22 they're going along with one. But do you feel as  
23 though, even if we went with their original  
24 recommendation for the three years for these

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1 activities, that that still wouldn't be sufficient?

2 DR. KENT: Three is what I recommended  
3 here.

4 MR. HARRINGTON: Right. But it seems  
5 like, at least the terms I'm hearing, appear to be  
6 different than the terms in here. I'm not, like I  
7 say, not that knowledgeable. So I'm just trying to  
8 determine if you're saying that you're recommending  
9 some different types of surveys going forward that  
10 Fish and Game didn't recommend in the November 5th  
11 memo.

12 DR. KENT: We've both recommended  
13 acoustic surveys for bats.

14 MR. HARRINGTON: You're on Section I?

15 DR. KENT: One. Right.

16 MR. HARRINGTON: I guess that's I  
17 little one.

18 DR. KENT: Ii.

19 MR. HARRINGTON: Aye-aye, Captain.

20 DR. KENT: In the mortality survey  
21 they talk about -- they weren't specific as to years,  
22 it looks like. It just says "multiple."

23 MR. HARRINGTON: And you're in  
24 section?



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1 DR. KENT: II(i) -- II(ii) -- II(i),  
2 rather. Sorry. Implementation of post-construction  
3 mortality surveys should be conducted over multiple  
4 years. Doesn't say how long.

5 MR. IACOPINO: There might be a  
6 subsequent...

7 MR. HARRINGTON: But you were talking  
8 about breeding surveys or something as well, which I  
9 don't see here.

10 DR. KENT: No. The Department found  
11 the avian studies satisfactorily complied with the  
12 survey recommendations. It says the Department does  
13 recommend that the Applicant implement a  
14 post-construction bird mortality study. The study  
15 should be conducted for three years. So we're on the  
16 same page on that one.

17 MR. HARRINGTON: But are there  
18 differences having to do with -- I thought you  
19 said -- it sounded like yours, when you read yours,  
20 there was a lot more studies being done --

21 DR. KENT: Yes.

22 MR. HARRINGTON: -- than I'm seeing  
23 here.

24 DR. KENT: Again, this is your

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1 question. So, breeding bird surveys I'm  
2 recommending.

3 MR. HARRINGTON: Which is different.

4 DR. KENT: Different.

5 MR. HARRINGTON: Okay.

6 DR. KENT: Diurnal raptor surveys,  
7 different. Nocturnal migrating bird surveys,  
8 different. And I do on the bat. And the  
9 difference -- the reason I'm recommending the  
10 additional stuff is because without it you have no  
11 context for evaluating the mortality studies, except  
12 for the acoustics. Acoustics you can match up with  
13 the bats, but you won't be able to make any  
14 comparisons between mortality data, breeding birds,  
15 raptors or nocturnal migrating birds.

16 MR. BOISVERT: If I could interject.  
17 Are you suggesting they count living birds and the  
18 dead birds so that they can compare the number and  
19 see how many of the living birds died, in a very  
20 simplistic --

21 DR. KENT: In a very simplistic way,  
22 yes.

23 MR. BOISVERT: Otherwise, you know  
24 just how many dead ones you've got, but you don't

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1 know how many live ones are out there to get dead, to  
2 put it in a very simplistic -- that's what you mean  
3 by "context."

4 DR. KENT: Right. I'm maintaining  
5 that you cannot determine the significance of  
6 mortality without knowing, in a very simplistic  
7 sense, the percentage of birds or bats you've killed  
8 out of the population.

9 MR. STELTZER: Dr. Kent, are you  
10 suggesting those additional studies, such as the  
11 diurnal raptor, the breeding bird survey, nocturnal  
12 migratory bird survey, to be done for -- to be done  
13 because you don't feel that the current surveys that  
14 have been done have adequately determined what the  
15 baseline is?

16 DR. KENT: Because we don't have  
17 turbines up, we don't know what the effect is. And  
18 we've heard testimony that they can't make a  
19 correlation between the number of birds they see now  
20 and what they can expect to be killed later. So  
21 there's no way to truly project.

22 MR. STELTZER: I guess what I'm  
23 getting confused with -- and it's my understanding  
24 that the diurnal raptor study, the breeding bird

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1 survey and the nocturnal migratory bird surveys would  
2 not look at mortality issues, but they would just do  
3 an assessment of what is there in the population, and  
4 then it's this post-construction mortality study that  
5 would look at the deaths.

6 DR. KENT: Right.

7 MR. STELTZER: And so I'm trying to  
8 understand what your position is on why these  
9 additional studies need to be done. Have they been  
10 done already to -- it seems like that's what  
11 Mr. Gravel presented already, is a little bit of a  
12 sense of what is within the population to create that  
13 bat baseline, so they can do the mortality study.  
14 And why these additional studies would be needed --  
15 and the reason might be because, you know, you feel  
16 that the current surveys that have been done don't  
17 provide an adequate baseline level?

18 DR. KENT: You would have to presume  
19 that the years -- the studies done years in advance  
20 indicating the particular population of birds  
21 breeding there or the particular number of raptors  
22 flying over or the particular number of nocturnal  
23 migrants doesn't change from year to year. And we  
24 know that's not true. The number changes all the

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1 time. So it's important to link up those years. So  
2 if we have mortality -- let's say we do a three-year  
3 study post-construction and we see the number of bird  
4 deaths drop. There could be a couple reasons for  
5 that. It could be the birds got smart and avoided  
6 the towers, or it could be we wiped out every bird in  
7 the area and there's nothing left to kill. But we  
8 don't know that without those two different kinds of  
9 information: What's living there now and what's  
10 being killed.

11 MR. HARRINGTON: Question. Dr. Kent,  
12 basically is what you're doing -- I'm going to read  
13 from a summary of what Mr. Iacopino put together for  
14 Public Counsel. It says, Therefore, the Counsel for  
15 the Public requests the Subcommittee impose the same  
16 conditions that were imposed upon Granite Reliable as  
17 applied to post-construction bird and bat mortality  
18 studies. And it goes on to say post-construction  
19 bird and bat mortalities --

20 (Court Reporter interjects.)

21 MR. HARRINGTON: -- studied for three  
22 consecutive years with full report and analysis to be  
23 produced after each complete year. In addition, we  
24 required Granite -- and this was what we did with

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1 Granite Reliable -- to conduct post-construction  
2 breeding bird surveys which had to be reviewed and  
3 approved by New Hampshire Fish and Game, and to  
4 replicate the pre-construction surveys for the site.

5 So, is this basically what you're  
6 saying? Just take what we did for Granite Reliable  
7 and impose the same conditions on here?

8 DR. KENT: No. I'm saying we've  
9 gotten smarter even since Granite Reliable. Well, I  
10 don't say "we." I think we've gotten a little  
11 smarter about this. I'll acknowledge that Granite  
12 Reliable was the first wind project I dealt with in  
13 New Hampshire, trying to piece together what we  
14 needed to know for a decision. We also had that  
15 project confounded a little bit with the mitigation  
16 agreement between the Applicant, AMC, and Fish and  
17 Game. So there was a little relief there in knowing  
18 we had property, money to buy more property to  
19 maintain populations. In this one, we don't.

20 In Granite Reliable, we were smart  
21 enough to realize mortality surveys needed breeding  
22 bird surveys to try to put the picture together. And  
23 for whatever reason, in this project I was more aware  
24 of the raptors. And we have peregrines. And

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1 nocturnal birds seem to be more forward. But  
2 honestly, I don't remember why we weren't smart  
3 enough with Granite to talk about all these issues.

4 MR. HARRINGTON: I guess this is thin  
5 ice for me when I go out on this thing. But seems to  
6 be more a legal issue. Maybe one of the lawyers can  
7 step in on this. But we have to base what we do on  
8 the record, I understand, that was presented to us.  
9 And we have a number of experts that presented  
10 options here. But it sounds as if what you're  
11 proposing is to go beyond not only what Fish and Game  
12 has stated in their letters, but beyond what the  
13 experts from the Applicant stated, but also beyond  
14 what the guy with the -- what's his name --

15 CHAIRMAN GETZ: Mr. Lloyd-Evans.

16 MR. HARRINGTON: -- Lloyd-Evans  
17 presented, and then, as requested by the Public  
18 Counsel, impose post-construction surveys for three  
19 years, as recommended by Public Counsel's expert  
20 witness, and then post-construction surveys overseen  
21 by Audubon-hired avian company for three years.

22 If you're proposing to go beyond that,  
23 how -- what are we using for the basis of doing that,  
24 since the expert testimony we saw didn't seem to have

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1 gone that far?

2 DR. KENT: Yeah, I think it did for  
3 Trevor Lloyd-Evans. I don't remember how much he  
4 said on this case. Certainly when we talked to him  
5 in Granite Reliable, he was pushing for a lot more  
6 than we got into the record. He was in agreement --  
7 well, I don't want to speak for him. But he was  
8 pushing for the same type of work I'm talking about  
9 and suggesting to the Committee right now. The Fish  
10 and Wildlife Service and that committee that's  
11 produced a couple of recent documents is synchronous  
12 with what I'm suggesting. I admit that Fish and Game  
13 has not gone as far. I will readily admit that the  
14 consultant has not. But I heartily -- while I  
15 recognize the consultant's expertise, and I commend  
16 them for their field work, again, I draw the line at  
17 deferring to their expertise in extrapolating and  
18 interpreting information.

19 CHAIRMAN GETZ: Well, let me just try  
20 to address this issue. I think in terms of what Mr.  
21 Harrington's talking about, what are the constraints  
22 on the conditions we can impose? The statute says a  
23 certificate of site and facility may contain such  
24 reasonable terms and conditions as the committee



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1       deems necessary, and may provide for such reasonable  
2       monitoring procedures as may be necessary.

3               When we're making a factual conclusion  
4       from the record based on testimony by witnesses as to  
5       whether some thing did or didn't occur, or may or may  
6       not occur, I think you're constrained to the evidence  
7       in the record. And in this case, I think what we're  
8       talking about here is a concern that there will be --  
9       without some significant conditions with respect to  
10      post-construction surveys and mortality studies,  
11      there's the prospect of unreasonable adverse effects.  
12      So I think we're probably all in the same boat in  
13      terms of looking through that factual issue. And now  
14      it's a question of what are the conditions that are  
15      necessary -- that we deem necessary to address the  
16      factual issues. So I don't think we're constrained  
17      by the particular conditions that have been raised.  
18      We can pick and choose among three different sources,  
19      whether it's the Applicant, Mr. Lloyd-Evans, the  
20      witness for Public Counsel, the Fish and Game, and/or  
21      some combination of things drawn from the record that  
22      appear sensible to us. So I don't think we're  
23      constrained in the way we fashion the conditions is  
24      the bottom line.

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1 MR. HARRINGTON: All right. That's  
2 helpful. Thank you.

3 CHAIRMAN GETZ: Mr. Steltzer.

4 MR. STELTZER: For me, I think of it  
5 from a risk assessment standpoint. You know, if we  
6 have a high risk here because of a lot of unknowns,  
7 then it might make sense to do as much studying as  
8 feasibly possible to really assess the situation.  
9 But my sense is that, from the testimony that's been  
10 provided and the data that's been provided, it's that  
11 it's a relatively low risk, and the level of study  
12 that's being suggested doesn't meet the risk that the  
13 project may have. And so the level of assessment and  
14 study should meet that lower level. It seems like  
15 some of the suggestions of doing the additional  
16 population studies on this one project, you know,  
17 doesn't take into the account the numerous literature  
18 reviews that are out there about the impacts of avian  
19 species and bats with turbines.

20 CHAIRMAN GETZ: Let's go back to this  
21 issue then and maybe get to the factual issue.

22 I mean, I think you're concluding that  
23 the risk may not be commensurate. The risk -- and I  
24 guess what's important there is where you're drawing

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1 that conclusion from. And then, if you're talking  
2 about studies out there, are you talking about  
3 studies out there that have been introduced in this  
4 proceeding, or studies that are out there that  
5 haven't been produced in this proceeding? Because I  
6 don't think we can rely on other issues or other  
7 studies that haven't been introduced here.

8 MR. STELTZER: Well, I think we can  
9 certainly look at the guidelines put out by the  
10 advisory committee in PC 14. That helped to factor  
11 in determining a site and what sort of risk level it  
12 is and then matching the study, the post-construction  
13 study to meet that risk at that individual site.

14 CHAIRMAN GETZ: Okay. I just want to  
15 be clear for the record what you were referring to.  
16 Sorry for the interruption.

17 MR. STELTZER: That's all right. No,  
18 that's really what I'm coming to and where I'm  
19 leaning on my determination here, is based off of  
20 that it's that level of study that's being suggested  
21 by Dr. Kent. To me, it just feels like that doesn't  
22 meet the risk of this project at this particular  
23 site.

24 DR. KENT: Do I get to ask -- I can

1 ask back, right?

2 So what is the basis for determining  
3 the risk for this project?

4 MR. STELTZER: Well, that's actually  
5 why I even threw out the idea of having this project  
6 go through the tiered assessment to determine where  
7 that risk actually is. And I recognize the Chair has  
8 some concerns, and rightfully so -- has some concerns  
9 about putting that out to another organization who  
10 might not even be interested in doing that risk  
11 assessment. So I think we just need to do our own  
12 judgment based off of what's been provided in the  
13 data and the record on what that level of risk is.

14 So I do put some -- going to Mr.  
15 Harrington's point, too, you know, the two  
16 professionals that have been here and two expert  
17 witnesses, being Mr. Lloyd-Evans and Mr. Gravel, it  
18 appears that it's somewhere in between those two that  
19 we need to look at. And where I see the conversation  
20 being more focused on is really the mortality study  
21 and how many years that post-construction mortality  
22 study should go, where Mr. Lloyd-Evans is suggesting  
23 three years versus Mr. Gravel which is suggesting one  
24 year. And maybe it's two. You know, that's what is

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1 in line with what's being proposed in Exhibit PC 14  
2 as well.

3 DR. KENT: For low risk.

4 MR. STELTZER: I believe that was  
5 projects that did not meet low risk, actually, even,  
6 that it was two years or more. So, two years.

7 DR. KENT: So my question to you is,  
8 you're concluding that this project has low risk to  
9 birds and bats?

10 MR. STELTZER: Based off of the inputs  
11 that have been provided, I do feel that it might not  
12 be at the same heightened level that would warrant  
13 the additional studies that you're recommending.

14 DR. KENT: Okay. Can I make an  
15 argument?

16 MR. STELTZER: Sure.

17 DR. KENT: Can I make an argument?

18 CHAIRMAN GETZ: Yes, but let me -- I  
19 want to make sure I understand the context in which  
20 these arguments are going to be made so it might be  
21 helpful to me in trying to come to some kind of  
22 conclusion about this.

23 Getting back to some very basic  
24 things. Sometimes I think I'm having difficulty

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1 keeping track of the post-construction mortality  
2 studies versus the post-construction surveys. And I  
3 think there's going to be at least one year of  
4 mortality studies. And then you have to decide,  
5 based on the mortality studies, whether you have  
6 other surveys of the populations to compare those to,  
7 which I think is what, Dr. Kent, you're proposing, as  
8 opposed to what the Applicant is saying, that you do  
9 your mortality studies, and then you compare it to  
10 some results that have occurred elsewhere. Is  
11 that --

12 DR. KENT: That's not what I'm  
13 proposing. That's what Mr. Gravel is proposing as  
14 his standard is comparison to other wind projects.

15 CHAIRMAN GETZ: So you want studies  
16 here, mortality studies here that are compared to  
17 surveys that are performed here.

18 And I'm not sure where you are on that  
19 issue, Mr. Steltzer, in terms of where the -- 'cause  
20 there's two -- there seems to be at least two moving  
21 parts: There's the length of the studies, the  
22 mortality studies, and then what they're compared to  
23 in terms of some generic metrics that are imported  
24 from elsewhere, or actual results of surveys that are

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1 conducted in this area. Am I framing this correctly?

2 DR. KENT: Yeah.

3 CHAIRMAN GETZ: Okay. And do you  
4 have --

5 MR. STELTZER: And I think my leaning  
6 on that is that they should be -- is along the lines  
7 of Mr. Gravel, is that there are a number of other  
8 studies out there about the impacts of birds and bats  
9 with turbines, and to use those existing studies to  
10 make the assessment on this project, as opposed to  
11 requiring -- you know, setting a precedent to require  
12 that each individual project, wind turbine project  
13 that comes forward, has to do it individualistically  
14 for their own area and determine that effect on its  
15 population.

16 CHAIRMAN GETZ: And I thought earlier  
17 that you were inclined toward -- so were you inclined  
18 toward a longer period of mortality studies, but you  
19 would compare those studies then to the more generic  
20 metrics rather than doing individualized surveys  
21 here?

22 MR. STELTZER: Correct. And as far as  
23 the time frame on those post-construction mortality  
24 studies, in my mind, it's more on the two-year line

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1           rather than a three-year line.

2                         CHAIRMAN GETZ:  Dr. Kent.

3                         DR. KENT:  I want to make sure I'm  
4           catching up with you.  Those other studies -- have  
5           you seen those studies?  Were they offered at  
6           testimony?

7                         MR. STELTZER:  Not that I'm aware of,  
8           no.  But I guess -- and I need to look at the record,  
9           as far as Mr. Gravel.  But I would certainly suggest  
10          that we -- to my understanding from listening to his  
11          testimony is that there are existing resources out  
12          there that we can be basing it off of, as opposed to  
13          doing it on this specific project itself.

14                        DR. KENT:  Yes, there are a lot of  
15          resources out there.  And they're all over the map,  
16          as you might imagine.  And they differ from the West  
17          to the Midwest, to the Southeast, to the Atlantics.  
18          They're so different from place to place, project to  
19          project.  So the question is:  What ones are we using  
20          for comparison, and how do we know that that  
21          constitutes no adverse impact?  None of that was  
22          proffered to us during testimony.  Instead, we have  
23          there's a bunch of stuff out there we'll compare to  
24          it, and if it looks like it's normal, then we're



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1 good. But we don't know what "normal" is. We don't  
2 know what the basis for the comparison is because we  
3 don't know what projects we're comparing to. We  
4 don't even know how many -- if there's enough  
5 projects in the forested northeast to compare it to  
6 yet that have data. None of that was offered to us.  
7 There's no basis for making a comparison that's been  
8 offered to us. It's all blind.

9 MR. STELTZER: Which goes to one of my  
10 points that I was attempting to bring up, too, as far  
11 as having a central repository for some of this data  
12 that would be -- I don't know what we can do within  
13 this docket and proceeding to assist in that creation  
14 of gathering and focusing that data to one place, so  
15 that future projects won't continue to go through  
16 this discussion that we're having here, but they can  
17 go and say it's at U.S. Fish and Wildlife Service.  
18 That's where the data is for the Northeast. Here's  
19 where you can go.

20 DR. KENT: Right. It doesn't exist  
21 yet, unfortunately. We've been urging them to get it  
22 together so we can look at cumulative impacts. But  
23 we're working without it, and that's one of the  
24 reasons when we did Granite that we pushed for

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1 something a little more rigorous. And that's the  
2 reason I'm being a pain today, is that we be a little  
3 more rigorous and we generate some data so that we  
4 don't have to make this up every time, because it's  
5 really frustrating. I mean, somebody saying don't  
6 worry about it, we'll compare it to something out  
7 there, you know, and if it's okay, we'll go forward  
8 and no big deal, instead of having that information  
9 we need in front of us to make an independent  
10 decision about whether that will have an adverse  
11 impact or non-adverse impact.

12 CHAIRMAN GETZ: Mr. Hood.

13 MR. HOOD: I have just a question.  
14 When we did Granite Reliable and then did Lempster,  
15 what did we think when they did their mortality  
16 studies, whether it was three years or one year?  
17 What were they going to compare those mortality  
18 levels to, to make a decision on whether the turbine  
19 should be shut down or time of year. And you  
20 mentioned some kill levels at Lempster, but now  
21 that's gone forward. Are they still going to have to  
22 make any changes in the way the turbines are acting?  
23 So what did they compare those avian and bat kills  
24 to, to decide that they could go forward? Was there

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1 something put into those studies that said you'll do  
2 your mortality studies and compare it to something,  
3 and then if there's a problem you've got to shut it  
4 down? They've done mortality studies, but they're  
5 still going. So what were those? I was fully  
6 thinking one year or two was fine. And then, come to  
7 find out, the established ranges that Mr. Perry  
8 talked about apparently aren't very reliable, or  
9 they're not there, I guess.

10 So I'm kind of agreeing with what  
11 you're saying. I think if we do need that data if  
12 the numbers that we're going to compare it to --  
13 there aren't any numbers to compare it to -- I'm not  
14 sure I'm making myself clear. But how can Lempster  
15 still be going forward with the kill numbers if they  
16 didn't have something to compare to that was in that  
17 finding of that particular project?

18 DR. KENT: Lempster is going to  
19 compare it to something that's unknown to us. And  
20 hopefully, Fish and Game and Fish and Wildlife  
21 Service would be involved in those continued  
22 discussions. That's the way it was supposed to work.  
23 But still, even Lempster is blind on what's the  
24 threshold and what's it relate to, where they're

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1 comparing just like it was proposed to us by  
2 Mr. Gravel, where it's, well, we'll look at other  
3 similar projects and see if it's no worse and go from  
4 there.

5 MR. HOOD: They probably haven't done  
6 that yet.

7 DR. KENT: Right. And my point right  
8 at the beginning, seems like days ago at this point,  
9 was that that's not really an appropriate standard,  
10 because that assumes the average is good, there's no  
11 adverse impact. But we don't know that until you  
12 make an independent, rigorous study to determine what  
13 kind of impact we're having. We're still going to be  
14 stuck with is 20 percent of the local population  
15 being killed significant or not significant. And  
16 we'll have to build in discussions with the agencies,  
17 because at some point somebody's going to have to  
18 make a call. But at least we'll have some sense of  
19 context here, rather than just comparing it to  
20 another wind project. I should find an analogy from  
21 everyday life to make it clear.

22 MR. HOOD: I think it's clear to me.  
23 I just -- what isn't clear to me is what we were  
24 basing those previous mortality studies on, what we

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1 were going to compare to, to determine if you were  
2 going to shut down some turbines or do time-of-year  
3 restrictions. It doesn't seem -- I thought there was  
4 something in those, and now you're saying, which is  
5 probably true, there really isn't any good numbers  
6 they can compare to. So those studies aren't going  
7 to be worth anything, because they've done some  
8 studies and they're going on and not making any  
9 changes. And that's why I think we need to do more  
10 studies now. You're right. We have to do more  
11 studies to make it -- to determine whether 40 birds  
12 and 60 bats, or whatever it was for one year, is out  
13 of 5,000 bats, and so it's not a big deal, or -- I  
14 just didn't know those previous studies, those  
15 previous projects -- I assumed there was some number  
16 that those mortality rates were going to be compared  
17 to. You're kind of saying there really isn't.

18 DR. KENT: This is an evolving process  
19 not just for us but for the whole country. Fish and  
20 Wildlife Service is just trying to catch up. There's  
21 all kinds of work groups going.

22 CHAIRMAN GETZ: Let me see if I can  
23 answer some of the questions he had about what  
24 happened elsewhere, because I think in Lempster there

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1 was a condition that approved the creation of, under  
2 the heading of Avian Species Protection, a technical  
3 committee that looked at these issues. And so there  
4 was like a process that was approved to address  
5 survey results and post-construction mortality  
6 surveys. And then it would meet, and there would be  
7 reports and there could be a recommendation for  
8 additional investigation. So it was more of a --  
9 rather than a -- I guess I would characterize this --  
10 and please feel free to correct me, Mr. Iacopino --  
11 as responding by creating a process to address these  
12 issues. And it was brought together by a number of  
13 the parties to that proceeding, which is different  
14 from the way -- so the actual conditions in the order  
15 don't go into detail about the length and type of  
16 studies and surveys; whereas in Granite Ridge [sic]  
17 there was more of a focus on creating in the  
18 conditions in the order what would be required of the  
19 Applicant and how to do it. And I think now is kind  
20 of, you know, another evolution of that, to create --  
21 or at least it seems to be heading down the path of a  
22 motion to create some more -- or some broader survey  
23 conditions.

24 DR. KENT: That's where I was going.

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1 I was going to tell that story, too.

2 CHAIRMAN GETZ: Oh, sorry.

3 DR. KENT: I did come up with an  
4 analogy. If I tell you, you know, in Smithville we  
5 had three car fatalities in a year, you go, wow.  
6 Then your next question is, well, how many people  
7 live in Smithville? About 400 million. Well, you  
8 go, three's not bad. If you say 30 people, you go,  
9 oh, my God. That's what we're trying to get at here.

10 MR. HOOD: Oh, I realize that. I was  
11 just thinking that these other studies had that in  
12 mind, that they had some number that they were going  
13 to compare that to, because that's why you said we're  
14 going to do a mortality study and be able to maybe  
15 make some adjustments in the way the wind farm's  
16 operating. I thought there was something in place  
17 already that you could compare to. And what you're  
18 saying is there isn't. So this is the place to  
19 probably start.

20 DR. KENT: In fairness, the  
21 Applicant's consultant believes it's appropriate to  
22 compare it to other wind farms. On that point we  
23 disagree.

24 CHAIRMAN GETZ: Mr. Harrington.

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1 MR. HARRINGTON: Yeah, just on that  
2 particular point. It's not just the Applicant's  
3 consultant. It's also Public Counsel's consultant,  
4 Lloyd-Evans.

5 The question was asked: "Are you  
6 suggesting that the Applicant develop a benchmark of  
7 some other measure that establishes what an  
8 acceptable level for biologically insignificant  
9 impact of this project would be?

10 "ANSWER: I think that would come out  
11 of the discussions with New Hampshire Fish and Game  
12 or U.S. Fish and Wildlife. To me, that would be a  
13 very useful result.

14 "QUESTION: But would you agree or  
15 disagree that documented mortality rates at other  
16 operational wind projects in the Northeast would  
17 provide an appropriate benchmark against which to  
18 judge the results that occur at the Groton project?

19 "ANSWER: I think that's a useful  
20 benchmark, yes." So that's Lloyd-Evans.

21 I mean, I'm trying to get at, Dr.  
22 Kent, what you're saying is then you would do these  
23 additional post-construction surveys to make the best  
24 estimate of the population of the various species in



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1 the area and then use that as a comparison, a  
2 benchmark, whatever you want to call it, yard stick  
3 to measure the deaths against. So if you do the  
4 survey and you estimate that there's 23 peregrine  
5 falcons that pass through the area, and 10 of them  
6 are found dead, then you're going to -- then you  
7 could make a determination as to whether that was  
8 biologically significant or not. Is that kind of  
9 where you're headed?

10 DR. KENT: Yes.

11 MR. HARRINGTON: And I guess my  
12 question then would be: How possible or how accurate  
13 is it to come up with a number like that? I mean, if  
14 you do these surveys, is there -- do you build in  
15 some factor into it or whatever? I mean, because  
16 unless you're out there 24 hours a day, 7 days a  
17 week, I mean, how good are the determination of  
18 population from these surveys? I mean, I just don't  
19 know. I'm not saying that they couldn't be. I'm  
20 just saying I'm not familiar.

21 DR. KENT: Yeah, the point of the  
22 survey is to design them in a way that you get a  
23 reasonable estimate. And they've done a pretty good  
24 job of that pre-construction. They've come up with

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1 reasonable estimates, I believe, of what's passing  
2 through and what's there.

3 MR. HARRINGTON: But what you're  
4 saying, and then apparently in reading Lloyd-Evans'  
5 testimony he agrees with, is that the  
6 pre-construction surveys give you a snapshot in time  
7 of what the population were like then. And since  
8 those have been maybe a year or two ago now, and  
9 certainly will be even further if and when the  
10 windmills get into operation, but they really don't  
11 tell you much about the population to use as a  
12 baseline during post-construction.

13 DR. KENT: Yes.

14 MR. HARRINGTON: Okay. So maybe draw  
15 one more conclusion, which really has not exactly  
16 anything to do with this. But why are we wasting our  
17 time with pre-construction surveys at all then?

18 DR. KENT: Because we're trying to get  
19 a sense of how sensitive this area is. So if you  
20 found a whole bunch of endangered species, you'd  
21 probably think twice about messing around up there,  
22 unless you had a mitigation plan in mind.

23 MR. HARRINGTON: But you would  
24 disagree with the two people, then, the statement

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1 here, that the mortality rates at operational wind  
2 projects in the Northeast would provide an  
3 appropriate benchmark against which to judge the  
4 results that occur at the Groton project?

5 DR. KENT: I wouldn't discount them  
6 completely. It's a useful comparison. But it's  
7 still a pretty vague comparison. And I think even if  
8 I was the Applicant, I would be worried about kind of  
9 a loosey-goosey comparison like that. That could  
10 come back to haunt me. It's actually better -- if  
11 I'm the Applicant, I want to know. Because if  
12 something's changed up there, I want to know whether  
13 it was me or Mother Nature doing it. I don't want to  
14 rely on what happened at somebody else's project or  
15 what happened five years ago on my site. You know,  
16 all of a sudden I'm in a mitigation dance with, you  
17 know, the federal agencies.

18 MR. HARRINGTON: And then let's say  
19 that these surveys were done, and then that would be  
20 a collective decision? Because it's still going to  
21 come up to -- I mean, if you're looking at some --  
22 you estimate the population to be 20. Is two deaths  
23 significant? Is four deaths significant? Is six  
24 deathly significant? I mean, you would envision at

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1           that point that would be collected between New  
2           Hampshire Fish and Game and U.S. Wildlife to  
3           determine whether it was significant enough to  
4           request mitigation, and how would the mitigation --  
5           would that come back to this Committee?

6                     DR. KENT:  Oh, no.

7                     MR. HARRINGTON:  Oh, okay.  They would  
8           say we need mitigation, and then someone would have  
9           the -- someone else would have the authority to say,  
10          well, you've got to shut down that particular turbine  
11          because it's killing too many whatever, widget birds?

12                    DR. KENT:  Actually, that's two  
13          different questions.  I would say -- let me answer  
14          the biological.

15                    You can answer the other one, okay.

16                    The agencies can't delegate authority  
17          in the determination of whether it's a significant  
18          impact or not.  You know, they're going to get the  
19          reports.  They're going to have discussions with the  
20          Applicant's consultants, or whoever it is, and  
21          they'll come to some agreement.  The issue of whether  
22          they come back to this Committee depends on what  
23          language we put in the conditions that require them  
24          to come back.

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1 MR. HARRINGTON: Well, maybe Chairman  
2 Getz can -- do they have -- does either of those two  
3 groups, the New Hampshire Fish and Game or U.S. Fish  
4 and Wildlife, if they determine there was a  
5 biologically significant amount of deaths, do they  
6 have the authority in themselves to take action to  
7 mitigate that? Can they tell the wind farm owners  
8 they've got to run less or shut down certain turbines  
9 or just say you must decrease these deaths by so much  
10 each year or something to that effect?

11 CHAIRMAN GETZ: I'm looking at how we  
12 wrote the conditions in Granite Reliable, which  
13 really talked a lot about how the Applicant worked  
14 with New Hampshire Fish and Game, and then, really,  
15 the Subcommittee would be a backstop. I'm not  
16 sure that the -- I don't know whether Mr. Iacopino  
17 knows whether there's any independent authority that  
18 Fish and Game or Fish and Wildlife Service has on its  
19 own to require action on behalf of the Applicant.

20 MR. IACOPINO: To the best of my  
21 knowledge, without doing any research on it, to the  
22 extent it does not involve endangered species, I do  
23 not believe that U.S. Fish and Wildlife would have  
24 the authority to simply say there's too many

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1 unendangered species being killed to require some  
2 kind of mitigation, nor do I believe that Fish and  
3 Game has any of that type -- New Hampshire Fish and  
4 Game has any of that type of authority either. Of  
5 course, I haven't done any research on that issue  
6 about those agencies' authority in this context. But  
7 I'm not aware of any.

8 MR. HARRINGTON: But they would have  
9 the authority to come back under the general  
10 provision if they don't think that the certificate is  
11 being lived up to or whatever?

12 MR. IACOPINO: Again, that depends on  
13 what the condition says, the language of the  
14 condition. Under RSA 162-H, the Committee can, in  
15 fact, delegate monitoring authority to a state  
16 agency. You can also designate the use of any  
17 particular type of technique or methodology for the  
18 state agency to employ. And, you know, you can  
19 fashion conditions around that, around your authority  
20 in that section, which I believe is RSA 162-H:4, III  
21 and III-a, which permits -- III permits the  
22 delegation of authority to monitor construction  
23 operation of a facility. However, you cannot  
24 delegate the authority to hold hearings, issue

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1 certificates or determine the terms and conditions of  
2 a certificate, or to enforce a certificate.

3 Enforcement falls to the Committee under Section 12.

4 You can also delegate, under III-a to  
5 an agency or official any particular technique,  
6 methodology, practice or procedure approved by the  
7 Committee. So those types of things can be delegated  
8 through the use of a condition to a certificate, if  
9 that's what the Committee proposes to do.

10 Mr. Chairman, can I address one other  
11 issue? I just want to make sure the record's clear.

12 CHAIRMAN GETZ: Sure.

13 MR. IACOPINO: It has nothing to do  
14 with what I just discussed. But there was discussion  
15 between Mr. Steltzer and Dr. Kent prior about  
16 literature in the record. And I just want to point  
17 out that at Applicant's Exhibit 1, Tab -- well, in  
18 Applicant's Exhibit 1 there is the prefiled testimony  
19 of Adam Gravel. He is from Stantec Consulting, and  
20 he testified right here -- on Page 33 of that  
21 prefiled testimony there is, in fact, a literature  
22 bibliography that he -- that's entitled "Literature  
23 Cited," and it lists a number of articles that  
24 supported his prefiled testimony. I just want that

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1 in the record so that it's clear some of this  
2 literature is indeed at least referenced in the  
3 record. Although I'm sure we don't have all those  
4 articles themselves, they are listed in his  
5 bibliography.

6 DR. KENT: Could you point me to those  
7 again?

8 MR. IACOPINO: Yeah. Page 33 of his  
9 very first prefiled direct testimony, and that was in  
10 Volume I of the Application, which is also  
11 Applicant's Exhibit 1. And it's -- the copy that I  
12 have in front of me doesn't have any tabs, so I don't  
13 believe that in fact it was tabbed. But it's his  
14 March 2010 prefiled direct testimony.

15 MR. STELTZER: Mr. Chair, and added on  
16 to that, I just took a moment to look a little bit  
17 more into the record here and what's available. On  
18 Applicant's Exhibit No. 5, which is the supplement to  
19 the Application, at Appendix 46 is Paul Kerlinger and  
20 John Guarnaccia's assessment of the risk assessment  
21 at the Groton Wind project. Towards the end of that  
22 there's an 11-page list of references. Certainly  
23 haven't gone through all those reference. But there  
24 are 11 pages worth of literature reviews that are



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1 noted here as well.

2 And one thing that, coming to the  
3 postulation or the idea that what is the risk here at  
4 this individual site, the report notes, and I quote:  
5 Overall, the project site is not discrete and  
6 distinguishable in character or habitat or  
7 anthological importance from surrounding areas in  
8 this part of New England. And so that just kind of  
9 adds into what level of risk do we actually have at  
10 this individual project.

11 CHAIRMAN GETZ: And is that Mr.  
12 Gravel's statement, or is that Kerlinger's statement?

13 MR. STELTZER: Kerlinger's.

14 CHAIRMAN GETZ: Okay. Well, let me  
15 see if I can figure out where we've got agreement.  
16 Oh, Mr. Dupee.

17 MR. DUPEE: Just a question of order,  
18 Mr. Chairman. Was there a second to Dr. Kent's  
19 motion?

20 CHAIRMAN GETZ: I'm not sure if we  
21 ever got an actual motion. I think we got an  
22 outline.

23 MR. IACOPINO: Right.

24 CHAIRMAN GETZ: So, I don't think --

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1 MR. HARRINGTON: I know it was long.

2 CHAIRMAN GETZ: -- we had a particular  
3 motion.

4 MR. DUPEE: Okay. I'm just trying to  
5 figure out where we are in the process here.

6 CHAIRMAN GETZ: Is it fair to say that  
7 there's agreement that there should be more than one  
8 year of post-construction mortality studies? Does  
9 anyone disagree with that?

10 (No verbal response)

11 CHAIRMAN GETZ: Then I guess the  
12 question is, is it two years or three years? Is  
13 there -- well, Mr. Dupee.

14 MR. DUPEE: Just another question to  
15 Dr. Kent.

16 I think when you were making your  
17 outline, was the last part of that outline that the  
18 continuing annual, ongoing checking would be optional  
19 on the part of the Applicant, or did I misunderstand  
20 you?

21 DR. KENT: Yeah, I would defer to the  
22 Committee on that one. It doesn't -- it's not  
23 important to me. So I would leave it to the  
24 Committee to see if somebody thinks it's important.

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1 MR. DUPEE: Okay. So you'll address  
2 that in your motion, whether you think it's  
3 important, put it in there, or if you think it isn't?  
4 I guess that's how it's going to be?

5 DR. KENT: What's the tenor of the  
6 group?

7 CHAIRMAN GETZ: Well, I guess for --

8 DR. KENT: I could leave it out and  
9 let you put it in.

10 MR. DUPEE: I could do that.

11 DR. KENT: Okay.

12 CHAIRMAN GETZ: I'd just note, at  
13 least from my perspective, I think there's some value  
14 in that type of ongoing monitoring that's been  
15 proposed over the life of the project as of the Avian  
16 and Bat Protection Plan. So...

17 MR. DUPEE: Mr. Chairman, just to  
18 follow up on that. Most of you are probably aware  
19 that the bat population in New England has taken some  
20 very severe downward swings recently due to a fungal  
21 infection. So if we were to go out there and look at  
22 bat populations for the next one or two or three  
23 years, we could very well lead ourselves astray. If  
24 that population was to recover, we're going to see

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1 more bats and come to the conclusion that the wind  
2 farm is causing a great fatality, when, in fact,  
3 there could be other swings out there that we are not  
4 being able to detect. So I think having ongoing  
5 monitoring is a critical part of any natural system  
6 like this with so many natural perturbations. Just a  
7 comment.

8 CHAIRMAN GETZ: Mr. Scott, did you  
9 have something?

10 All right. So is the two -- how many  
11 of the members think that two years of mortality  
12 studies is sufficient, sufficient in and of itself?

13 (Multiple members raise hands.)

14 CHAIRMAN GETZ: So, then, how many  
15 folks think that three years of mortality studies is  
16 more appropriate?

17 MR. HARRINGTON: Just a question  
18 before, because I'm not --

19 CHAIRMAN GETZ: I'm just trying to get  
20 a sense of the --

21 MR. HARRINGTON: This is a question,  
22 not agreement.

23 CHAIRMAN GETZ: I thought it was two  
24 and a half.

[DELIBERATIONS]

1                   MR. HARRINGTON: Well, there's more to  
2 this than just the post-mortality studies, because  
3 we're also talking continuation of breeding studies  
4 and all this, for lack of a better term.

5                   CHAIRMAN GETZ: Well, I'm just trying  
6 to get --

7                   MR. HARRINGTON: So are you putting  
8 this whole package together and saying  
9 post-construction studies of one, two or three years  
10 involving the whole package and not just the  
11 mortality?

12                   CHAIRMAN GETZ: What I'm trying to get  
13 to is where there's agreement, and to see -- and then  
14 to keep going through this kind of piece by piece,  
15 going from the part to the whole, to see -- because I  
16 have a sense that there's some agreement on a  
17 lengthier term of mortality studies. And it sounds  
18 like what it's breaking down to is what you can  
19 compare those mortality studies against, whether it's  
20 the generalized proposal by Mr. Gravel that you look  
21 at what's happening elsewhere in New England versus  
22 let's do some very particular studies here to make  
23 that comparison.

24                   So it sounds like we have -- there's

1 some general, or at least a majority position,  
2 perhaps, on there should be three years of mortality  
3 studies. Now, it's kind of where do we go in terms  
4 of what do we compare that information to, what's the  
5 metric. Is it a benchmark that we don't know what it  
6 is right now and it's going to develop over time  
7 based on what happens elsewhere, or is it going to be  
8 developed based on actual surveys of this area? And,  
9 of course, Dr. Kent's position is you've really got  
10 to take a look at what's happening here. And I think  
11 Mr. Steltzer has raised the opposite view, based on  
12 what he's seen in the record, that you can fairly  
13 look at what's happened elsewhere to make that  
14 comparison.

15 MR. HARRINGTON: Just as a follow-up  
16 to that, I'd like -- that's what Mr. Gravel and  
17 Mr. Lloyd-Evans both seem to be going along with,  
18 this idea that you could look at the mortality at  
19 other operational wind projects in the Northeast.  
20 Again, Lloyd-Evans: "I think that's a useful  
21 benchmark, yes."

22 DR. KENT: Right. And again, you  
23 know, nobody should be talking for Trevor. That's  
24 only part of a discussion with him. We need to be

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1 careful. Let me put it that way. We need to be  
2 careful about interpreting that as the limit of his  
3 desire.

4 CHAIRMAN GETZ: Well, I guess what I  
5 would propose at this point, and put the onus back on  
6 you, Dr. Kent, is to make a motion and see if we get  
7 a second, and then maybe have some discussion and  
8 take a vote. It's hard to tell which way -- I think  
9 that's maybe the more appropriate approach at this  
10 point. I think we've talked about the issues a lot.  
11 I think they're fairly well framed. So let's do it  
12 in the -- if you can.

13 DR. KENT: Yes. I'm almost out of  
14 voice.

15 CHAIRMAN GETZ: Well, make sure  
16 that --

17 DR. KENT: Yes.

18 CHAIRMAN GETZ: -- the reporter --

19 DR. KENT: I'm boosting up to the  
20 microphone here.

21 For the purpose of allowing this  
22 Committee to determine if there's significant adverse  
23 impacts from this project, I move --

24 CHAIRMAN GETZ: Unreasonably adverse.

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1 DR. KENT: Unreasonably adverse.  
2 Thank you. I move that we require three years of  
3 breeding bird surveys post-construction, three years  
4 of diurnal raptor surveys post-construction, three  
5 years of nocturnal migrating bird surveys  
6 post-construction, three years of bat surveys  
7 post-construction, and three years of bird and bat  
8 mortality surveys post-construction, all of those in  
9 coordination with Fish and Game and the Fish and  
10 Wildlife Service, and consistent with work done by  
11 this Applicant and his consultants pre-construction.

12 CHAIRMAN GETZ: Okay. Is there a  
13 second? Dr. Boisvert.

14 Any discussion? Mr. Scott.

15 MR. SCOTT: In the -- taking that end,  
16 in the Public Counsel's request on the same lines --  
17 not quite the same -- but he further goes on, "The  
18 study should be conducted for three years and a full  
19 report with analysis should be produced after each  
20 complete year."

21 Dr. Kent, do you think that would not  
22 be valuable also, to report --

23 DR. KENT: Yes, please. Final  
24 amendment?



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1 MR. SCOTT: I would offer that.

2 DR. KENT: I'm getting tired at the  
3 end of the day. I left out some verbiage.

4 CHAIRMAN GETZ: Well, let's -- I think  
5 we can dispense with the formalities of withdrawing  
6 motions and seconds. Any objection to adding that as  
7 an amendment to the motion?

8 (No verbal response)

9 CHAIRMAN GETZ: Okay. Hearing no  
10 objection, it's amended.

11 Mr. Dupee.

12 MR. DUPEE: For considering  
13 amendments, I think I'd like to offer as an amendment  
14 that we continue with the annual monitoring by the  
15 facility for reasons we talked about earlier, which  
16 is there are ongoing trends in the animal populations  
17 that change year to decade. We won't pick them up if  
18 we only do three years. I gave the example of the  
19 bat populations which are in decline at the moment.  
20 If we base all our data on three years' worth of  
21 data, we may totally miss longer term trends. But I  
22 think it would be, from an ecological point of view,  
23 a better way to evaluate changes over time, and  
24 whether those changes are due to the population --

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1           fluctuations are due to any conditions at the  
2           facility, that we would look at ongoing monitoring.

3                   CHAIRMAN GETZ: Well, would this be  
4           fair to say: What you're saying is that you would  
5           like to see the studies that Dr. Kent's proposing be  
6           done in the full context of the Avian and Bat  
7           Protection Plan, and that the recommendation by the  
8           Applicant for that plan, to follow its protocol, be a  
9           condition as well, and that really what we're doing  
10          is adding his particular motion with respect to the  
11          types of studies and length of studies, that that be  
12          also on top of them performing under the ABPP?

13                   MR. DUPEE: I would say they would  
14          perform as presented in the ABPP. Talking about  
15          having members of the facility doing standardized  
16          sorts of walks. It wouldn't be a formal, full,  
17          professional, you know, annual event. It would be  
18          their protocol for looking for dead bats and birds,  
19          so we have a comparison, a bench line of standardized  
20          observations from year to year that you can look for  
21          longer term trends in mortality. So that would not  
22          be a large consultant study. It would be the staff  
23          of the facility carrying out standardized collection  
24          of mortality.

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1 CHAIRMAN GETZ: I think I get it.

2 MR. DUPEE: So if were to say it more  
3 colloquially, people may take a course and they may  
4 walk 100 yards and they will look so much to either  
5 side and they will pick up -- or notice where the  
6 dead birds are and try to determine what species they  
7 happen to be. That's sort of what they would be  
8 doing. And they would do that same thing year after  
9 year, so you have a statistical basis for comparison.

10 CHAIRMAN GETZ: But is that something  
11 different, or that's what they're --

12 MR. DUPEE: I believe that's what the  
13 Applicant's proposing to do, as far as part of their  
14 plan is concerned. The staff itself would do these  
15 sort of formal -- not in the formal sense of a  
16 consultant study, but formal in the sense of formally  
17 a process of collecting the dead birds and rats --  
18 bats.

19 CHAIRMAN GETZ: Okay.

20 DR. KENT: Can we just try to clarify  
21 it? So are you referring to the informal monitoring  
22 part of their Avian and Bat Protection Plan?

23 MR. DUPEE: I think they talk about  
24 subsequently -- this is Iberdrola Renewable's memo we

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1 talked about, Carol Henderson -- or to Carol  
2 Henderson from Kristen Goland. Operational  
3 monitoring is a series of long-term standardized  
4 services -- or surveys, rather, using operations  
5 personnel. So, in other words, the personnel would  
6 be instructed, here's how you conducted the survey,  
7 and they would then do that work.

8 CHAIRMAN GETZ: I'm afraid we have  
9 some confusion for the record. Let me see if I got  
10 this. You want them to follow the ABPP --

11 MR. DUPEE: After -- I'm sorry, Mr.  
12 Chairman.

13 CHAIRMAN GETZ: But that in addition  
14 to the ABPP, Dr. Kent is proposing --

15 MR. DUPEE: That would be -- I would  
16 add -- I would amend Dr. Kent's motion, as amended  
17 already by the gentleman from Air Resources, to add  
18 in this annual to continue on as proposed by the  
19 Applicant.

20 CHAIRMAN GETZ: Any other discussion?  
21 Mr. Steltzer.

22 MR. STELTZER: I have some hesitancy  
23 towards this. I'm looking at Applicant's Exhibit 5,  
24 Appendix 46, which is the Kerlinger study. And it

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1 notes that U.S. wind farms have an average of 2.51  
2 bird kills per turbine per year, and that that rate  
3 is relatively higher, somewhat greater in the Eastern  
4 United States. And I don't know if the level of  
5 studies that are being suggested here are a good fit  
6 with what the actual risk actually is. And I think I  
7 do like the idea of including, over the life span of  
8 the project, doing that yearly assessment. And  
9 that's in the ABPP. And I would agree to a  
10 three-year mortality study. But as far as doing the  
11 additional breeding surveys, diurnal bat studies, et  
12 cetera, I have some hesitancy towards those.

13 CHAIRMAN GETZ: Dr. Boisvert.

14 MR. BOISVERT: If I could comment?

15 Your reference to the two-point whatever bird  
16 fatalities per year is sort of the equivalent of what  
17 might be referred to as a meta study in the  
18 pharmaceutical world, where you look at all the  
19 studies on heart disease that might have been carried  
20 out and might compare, you know, 4,000 different  
21 studies. But in doing that kind of comparison, they  
22 make some attempt to standardize so that they're  
23 comparing equivalent kinds of observations in  
24 equivalent situations. I think that raw number is

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1 like saying there are two arrowheads per  
2 archeological site in America. Well, I as an  
3 archeologist would hear that and chuckle. It isn't  
4 necessarily a meaningful kind of statistic. What  
5 we're looking at here is something that can be  
6 comparable in the same place with the same  
7 methodology, roughly the same personnel, at least  
8 with the same training, over a specific period of  
9 time. I think that when people look at the status on  
10 avian fatalities, bat fatalities on wind turbines 10  
11 or 20 years from now, they will have a far more  
12 sophisticated understanding and look at the kinds of  
13 data we're looking at today and thinking they're  
14 simply not adequate to make certain kinds of  
15 judgments and statements. We have the disadvantage  
16 of not having that more correlated, more robust data  
17 base that has been through the kinds of comparisons  
18 for a meta study. So, yes, that's a true statistic.  
19 But it's hard for me when I look -- because I look at  
20 lots of things and over lots of places for what I do.  
21 And that doesn't -- it does not impress me as being a  
22 significant kind of statistic for comparison.

23 CHAIRMAN GETZ: Mr. Harrington, did  
24 you have something?

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1 MR. HARRINGTON: Yeah, I'm still a  
2 little concerned on the fact that we seem to be -- I  
3 mean, we've got the recommendation from Fish and Game  
4 that they somewhat changed to go back to the original  
5 recommendation. If you look at what was proposed by  
6 the Applicant and their witness, and then you look at  
7 what was proposed by Public Counsel and their  
8 witness, we're going beyond the collective. If you  
9 took all of the things put together from those other  
10 three groups, we're imposing criteria above that. I  
11 just think this point -- you know, none of this was  
12 brought out in the hearing. And the Public -- I  
13 mean, I'd be willing to go as far as what Public  
14 Counsel's objection was -- or condition was, which is  
15 kind of worded kind of funny, but imposed  
16 post-construction surveys for three years. This is  
17 the recommendation from Public Counsel's expert  
18 witness in this regard. But I think this one, we  
19 just -- we're going well beyond what we have evidence  
20 in the record to support. And I see that as not a  
21 bad expert, by any stretch of the imagination.

22 CHAIRMAN GETZ: Okay. Well, I think  
23 it's fair to say that the opinions of the respective  
24 members are forming, and I don't think this is an

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1 issue where there's going to be unanimity. So I  
2 guess I would call -- well, I guess Dr. Kent does  
3 raise an issue.

4 Mr. Perry had to leave for a personal  
5 matter. So we have eight of the nine members  
6 present. Whether we call the question now and vote  
7 with the eight members who are here, or do we wait  
8 until first thing in the morning and vote on this  
9 issue? Because I really think we're -- I'm not sure  
10 there's a lot to be gained by further discussion. I  
11 think calling the question would make some sense,  
12 whether it's -- I guess I'm indifferent to whether  
13 it's at 5:00 today or 9:00 tomorrow morning.

14 Mr. Scott, you had something?

15 MR. SCOTT: Two quick questions.  
16 Since we -- I agree there's really little difference.  
17 We ought to wait for the other member to come back,  
18 since there's no down side to that in my opinion.

19 And maybe something for people to  
20 think about, I guess, my question, not to complicate  
21 this matter, but to the extent we are requiring the  
22 Applicant to invoke the ABPP for, apparently forever,  
23 I guess I would ask -- one thing I did get out of  
24 science today is -- from discussion today is that



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1 science is evolving. So we're talking about locking  
2 the Applicant into this plan --

3 CHAIRMAN GETZ: It's own plan.

4 MR. SCOTT: -- it's own plan, but  
5 understanding science will change over the years. So  
6 I guess my question would be, is there some mechanism  
7 we should consider putting in as a condition where we  
8 allow that plan to change? Because the way I view  
9 it, I assume we're locking them into the plan they  
10 submitted to us.

11 CHAIRMAN GETZ: I think that's true.  
12 But I'd have to go back to look to see how much  
13 flexibility there is within the plan, in terms of  
14 change and the best practices. Mr. Dupee.

15 MR. DUPEE: Just going to make a  
16 point, Mr. Chairman. You and I have spoken earlier  
17 about this, which involved another committee which  
18 also has a quorum issue that meets tomorrow morning  
19 at 9:30. So, depending upon when we meet, I may or  
20 may not be here for it, or I have to make a choice as  
21 to which group to attend. So there is uncertainty  
22 around that.

23 CHAIRMAN GETZ: Was it your intention  
24 to come here at 9 a.m. and then go to the other?

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1 MR. DUPEE: The only nice thing is the  
2 other meeting is literally, I could walk from here to  
3 there. So if you were to do a vote exactly or  
4 shortly after 9:00, that would give me time to get  
5 there.

6 CHAIRMAN GETZ: This is what I would  
7 propose: That we meet at 9:00 a.m., that at 9:00  
8 a.m. Dr. Kent rephrase his motion, incorporating the  
9 amendments so that it's clear what the three pieces  
10 are, and then we call the question. And I'm hopeful  
11 that -- well, we'll see what the result is. But in  
12 any event, it puts you in a position, Mr. Dupee, to  
13 attend your other meeting to make sure there's a  
14 quorum, and hopefully you'll be able to return to us  
15 fairly quickly.

16 MR. DUPEE: That's the next -- brings  
17 us to the next question. The meeting is scheduled to  
18 go from 9:30 to 11:00 and voting on an RFP, whether  
19 to accept it or not, for buying a major state  
20 computer system. So...

21 So the other thing we could do, if you  
22 wish, I could present that public health piece --

23 CHAIRMAN GETZ: That's on an  
24 assumption that there's -- well, never mind.

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1 MR. DUPEE: So if you wish, I could  
2 also present the public health piece now, if that  
3 would help in any way, because I can't guarantee that  
4 I'm going to be back here at 10:00. Or, if you wish,  
5 if the Committee is willing to adjourn or to  
6 deliberate on other things until I come back, which  
7 would be no later than 11:15, that's fine, too.

8 CHAIRMAN GETZ: I think what we'll  
9 need to do is recess, because I think it's going to  
10 take a while to get through your part of -- you're  
11 doing part of the public health safety --

12 MR. DUPEE: Right.

13 CHAIRMAN GETZ: -- and Mr. Hood is as  
14 well. Maybe we'll start -- we'll have the vote on  
15 the natural environment issues and see where that --  
16 how long that goes, and then turn to Dr. Boisvert  
17 about historic sites. And then we'll go -- then  
18 we'll go to public health and safety, whether you're  
19 here or not, and then we'll play it by ear whether  
20 it's you or Mr. Hood that goes first.

21 MR. DUPEE: Okay.

22 CHAIRMAN GETZ: Okay. Is there  
23 anything else before we recess for the day?

24 MR. BOISVERT: Is it legitimate or

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1 possible to start at 8:30? Is there a prohibition to  
2 starting earlier than --

3 MR. IACOPINO: There's a published --  
4 (Court Reporter interjects.)

5 MR. IACOPINO: I'm sorry. Mr.  
6 Chairman, there was a published notice to the public  
7 of 9:00 a.m.

8 CHAIRMAN GETZ: So I think we're  
9 locked in at this point until 9:00 a.m.

10 MR. BOISVERT: Okay. Don't be late.

11 CHAIRMAN GETZ: I see nothing else, so  
12 we're recessed for the day. Thank you, everyone.

13  
14 (WHEREUPON, DAY 1 AFTERNOON SESSION  
15 was adjourned at 5:08 p.m.)  
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