1	STATE	OF NEW HAMPSHIRE							
2	SITE EV	ALUATION COMMITTEE							
3	April 15, 2015 - 9:22 a.m.								
4	Public Utilities Commission 21 South Fruit Street Suite 10 Concord, New Hampshire								
5									
6	IN RE:	SEC Docket No. 2014-04							
7	SITE EVALUATION COMMITTEE: Site 100 through Site 300 Rulemaking Proceeding. (Meeting for members to								
8									
9		discuss the proposed rules and the public comments thereto.)							
10									
11									
12	PRESENT:	SITE EVALUATION COMMITTEE:							
13	Chrmn. Martin P. Honigber (Presiding as Chairman of								
14 15	Cmsr. Thomas S. Burack (Vice Chairman of the SEC	Dept. of Env. Services							
16	Cmsr. Robert R. Scott	Public Utilities Commission							
17	Dir. Elizabeth Muzzey William Oldenburg	DCR-Div. of Historical Res. Dept. of Transportation							
18	Patricia Weathersby Roger Hawk	Public Member Public Member							
19									
20	Also Present:	avid K. Wiesner, Esq. (NHPUC)							
21	Λ	Michael J. Iacopino, Esq.							
22	(E	rennan Lenehan Iacopino & Hickey)							
23	COURT REPORTER:	Steven E. Patnaude, LCR No. 52							
24									

1			
2		INDEX	
3			PAGE NO.
4	ITEM:	FURTHER DISCUSSION OF VIA SCOPE AND AREA OF POTENTIAL VISUAL EFFECT -	4
5		Site 301.05(b) and Site 301.14(a)	
6	ITEM:	SOUND STUDY METHODOLOGY - Site 301.08(a)(1)	8
7	ITEM:	WIND ENERGY SYSTEM NOISE LEVEL SITING CRITERIA - Site 301.14(f)(2)a	18
8	ITEM:	SHADOW FLICKER STUDY METHODOLOGY -	52
9		Site 301.08(a)(2)	0.2
10	ITEM:	SHADOW FLICKER SITING CRITERIA - Site 301.14(f)(2)	72
11			
12	ITEM:	WIND PROJECT SETBACKS AND HOW MEASURED - Site 301.14(f)(2)c	84
13	ITEM:	ELECTRIC TRANSMISSION LINE SETBACKS - Site 301.08(b)	105
14	ITEM:	PUBLIC INFORMATION SESSIONS -	116
15		Site 201.01 and Site 201.02	
16			
17	MOTION	BY CMSR. SCOTT to adjourn the meeting	
18		BY DIR. MUZZEY N THE MOTION	126 126
19			
20			
21			
22			
23			
24			

1	P	R	0	С	E	E	D	Ι	N	G
_	E	\mathbf{r}	U	C	ىند	ىد	ע	_	TA	G

CHAIRMAN HONIGBERG: We are going to resume our discussions of the comments on the proposed rules on the Initial Proposal. We were working through issues assisted by the issues list, what I call "glorified notes", regarding all the comments.

I think, before we get started, I'll ask the people who are the members who are here today to go around the room and introduce themselves, because I do know there's people in the audience who were not here last time and may not have been attending very much. So, I'll start to my left.

COMMISSIONER SCOTT: Good morning. I'm

Bob Scott. I'm with the -- a Commissioner with the New

Hampshire Public Utilities Commission.

CHAIRMAN HONIGBERG: My name is Martin Honigberg. I'm the Chair of the Public Utilities

Commission, and, by statute, that also makes me the Chair of the SEC.

VICE CHAIRMAN BURACK: Good morning.

I'm Tom Burack. I serve as Commissioner of the Department of Environmental Services, and, by statute, I serve as Vice Chairman of the SEC.

DIRECTOR MUZZEY: Hello. My name is

```
1
       Elizabeth Muzzey. I serve as Director of the New
       Hampshire Division of Historical Resources in the
 2
 3
       Department of Cultural Resources.
 4
                         MS. WEATHERSBY: Patricia Weathersby,
 5
       public member.
                         MR. HAWK: Roger Hawk, public member.
 6
 7
                         MR. OLDENBURG: I'm Bill Oldenburg, the
       Assistant Director of Project Development at the DOT.
 8
 9
                         CHAIRMAN HONIGBERG: I know that one of
10
       the things we talked about last time, before we pick up
11
       anything new, was the visual -- the visual effect distance
       question, and the lack of definition about urban, rural,
12
13
       and the like. And, I think, just, again, just so people
14
       understand, that no decisions have been made. What's
       likely to happen is, we're going to continue to discuss
15
16
       issues, see if we can come to some sort of point where it
17
       looks like there may be some consensus, and then generate
18
       a new version of these rules. It's almost -- there's no
19
       chance that there's going to be a final proposal adopted
20
       today, because the language isn't going to have been --
21
       going to be worked out.
22
                         I'll also say that the House of
       Representatives' Science, Technology Committee a week ago
23
```

voted "ought to pass" on the Senate's bill that would

extend the deadline for this rulemaking process to November 1st.

Now, they did make a change to another part of the bill. It's not a very significant change. I don't know what the Senate -- I assume that the House will pass that bill. I don't know how the Senate will react to the proposed change. But, if I were betting, I think it's likely that the Legislature will end up extending this deadline to November 1st. As we sit here today, our deadline is July 1st. So, we're working within that construct. But I think there's a very good chance that that's out there.

Anyway, circling back to visual impact, we talked about just setting a mile deadline and having applicants seek a waiver, if they wanted a waiver. As I thought about that afterwards, I saw a timing problem. In that, applicants have to do all kinds of work before the SEC even knows of their existence. And, so, it's not clear when exactly and how to request a waiver in that context. So, they wouldn't necessarily be able to act, if they request a waiver, without having done a significant amount of work that they might not otherwise have to do.

So, the issue with the "rural"/"urban" language that was in the Draft Proposal is those terms are

undefined. Well, there are definitions of those things. And, we went out, and Attorney Wiesner and I were looking at the Census Bureau information. I mean, that's one of the things the Census Bureau does. It identifies areas within every state that, and I forgot exactly what their terms are, but it's "urban clusters", "urban zones", "rural", and there are defined terms. And, the State of New Hampshire has been broken up by the Census Bureau into a zillion different tracks, and each one of them is either -- is in one of those categories. And, so, it may be possible to use those definitions, to use the terminology or at least a version of the terminology that was in the Initial Proposal. It may have to be modified somewhat to track the Census Bureau language, but that is a set of definitions that's out there that we could use and would eliminate that timing problem with the waiver. So, before we go further, what do people think about an approach like that? Is that -- I'm seeing some heads nodding, which is encouraging. Yes, Commissioner Burack. VICE CHAIRMAN BURACK: Thank you, Mr. That's very helpful, and really encouraging to Chairman.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

understand that those kinds of -- that those kinds of definitions exist out there. It did occur to me, after

```
1
       our session last time, that we do have in our midst here
 2
       somebody who is an experienced planner in Roger Hawk.
 3
       And, Roger, I was going to, and I don't know if you have
 4
       anything you can share with us beyond, based on your
 5
       experience, beyond what we just heard from the Chairman,
 6
       have you seen those Census definitions used in this kind
 7
       of way elsewhere? Or are you, from your planning
       experience, aware of other sort of objective criteria that
 8
 9
       are out there that we might use to guide us in developing
10
       rules in this arena?
11
                         MR. HAWK:
                                    I think the Census Bureau has
12
       the best for statewide, I think their standards probably
       are the best. Because, other than that, you break down
13
14
       into either regional or local, and they're all over the
15
       place. So, I think the Census Bureau is the way to go
16
       looking statewide.
17
                         CHAIRMAN HONIGBERG: Off the record.
18
                         (Off the record.)
19
                         VICE CHAIRMAN BURACK: Mr. Chairman, it
20
       sounds like --
21
                         CHAIRMAN HONIGBERG: We're back on the
22
       record, Commissioner Burack?
23
                         VICE CHAIRMAN BURACK: Yes, we're back
24
       on the record.
```

CHAIRMAN HONIGBERG: All right.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

VICE CHAIRMAN BURACK: It sounds like we've identified an appropriate path forward for, you know, defining some standards around that. And, then it's just going to come to a question of what are, in fact, the distances that will need to be considered within those different -- within those different areas, whether urban, rural, etcetera. And, I think last time we had talked about having one consistent distance, and I don't think that that would be appropriate, I think, probably in a rural area, in an area where there are generally longer vistas by which people would view things, that a greater distance for the study area would be of -- or, the area of potential visual effect would be appropriate. I don't know what, you know, what that exact distance would be, but I think a fair distance. The distance should vary depending on the -- you know, certainly, the density and perhaps the topography as well.

CHAIRMAN HONIGBERG: Well, that's the philosophy of the Initial Proposal. The problem was the lack of definition. So, I think that that's -- we can go back to that and just import some definitions and some terminology and go from there.

I think the next new issue was the sound

1 study methodology. There weren't a lot of comments, but 2 there were comments we received on that. And, I'll just 3 remind everyone that you have received, through e-mail, 4 all of the comments from everyone. And, they're all on 5 the website, even the late-filed comments, which are 6 supposed to be marked as "late-filed". 7 COMMISSIONER SCOTT: Yes, they are. VICE CHAIRMAN BURACK: Mr. Chairman, may 8 9 I --10 CHAIRMAN HONIGBERG: Commissioner 11 Burack. 12 VICE CHAIRMAN BURACK: Thank you. 13 spent some time looking at the work done by the SB 99 14 15 16 a very high level of consensus on a number of key issues

spent some time looking at the work done by the SB 99
Group in this area. And, although the Group did not reach a consensus on all subjects, I think they actually reached a very high level of consensus on a number of key issues here relating to appropriate noise standards here. And, I would suggest that we look closely at adopting in the rules, as much — with as much specificity as we reasonably can, the standards that would provide guidance for people as to what does or does not need to be done. And, I think that would apply in the pre-construction baseline survey context, with respect to predictive modeling, and also with respect to post-construction

17

18

19

20

21

22

23

compliance monitoring.

And, I don't know how you want to approach this, but, and, unfortunately, the pages in the SB 99 Report are not numbered, but within the -- within the section that is headed "NH OEP SB 99 Pre-Rulemaking Process Health & Safety Work Group", and this is roughly halfway through the document, maybe a little closer to the front than to the back, this area is discussed under "Wind Turbine Noise Emissions".

thoughts or comments? I agree. I mean, when I looked at the SB 99, I can see that there is not consensus on everything. I think the SB 99 Report made it pretty clear that there wasn't true consensus on a lot of these things, but there seemed to be fairly broad consensus. I know a lot of the comments we received indicate that there's more consensus than maybe we thought there was.

Other thoughts? There seems to be general agreement, as I say, with Commissioner Burack.

And, I think it's possible for us to go through the SB 99 document and try to tease out more of what was generally agreed upon.

Does that seem like a sensible thing for us to do? I see nodding heads.

1 DIRECTOR MUZZEY: I would agree with 2 A lot of work went into that document. And, we 3 should take advantage of the parts that there was 4 consensus on. 5 CHAIRMAN HONIGBERG: I think there seems 6 to be general agreement that we should try to do that. 7 Attorney Wiesner, you have probably a better handle on that than I do, would you agree? 8 9 MR. WIESNER: It wasn't clear to us 10 initially, looking at the OEP Working Group Reports, the 11 level of consensus that apparently had been reached 12 regarding methodology. But there were four acousticians 13 involved in that process. And, in terms of defining a 14 specific methodology to be used in performing sound 15 studies, it seems that there was substantial consensus 16 among those professionals, and no objection from stakeholders. And, I think, as you suggested, Mr. 17 18 Chairman, the comments that we received, no one objected, 19 and there seemed to be broad support for including that 20 level of detail. 21 CHAIRMAN HONIGBERG: But the method --22 MR. WIESNER: And, it is quite detailed. 23 I mean, the New Hampshire Wind Watch reduced the OEP

recommendations to rules language, that appears on Pages

```
1
       17 of 19 of their comments, and it is quite detailed, and
 2
       it takes up two and a half pages. But, you know, it
 3
       serves the purpose, perhaps, of better defining what a
 4
       professional standard sound study should include.
 5
                         VICE CHAIRMAN BURACK: Attorney Wiesner,
 6
       do you have the date on that New Hampshire Wind Watch
 7
       document?
 8
                         CHAIRMAN HONIGBERG: I'm pretty sure
 9
       they're all marked the "23rd".
10
                         MR. WIESNER: Yes. These comments were
11
       filed on the 23rd by Wind Watch and Windaction.
12
                         CHAIRMAN HONIGBERG: The cover letter
13
       from Lisa Linowes and Lori Lerner, right?
14
                         MR. WIESNER: Yes. It's a substantial
15
       document. And, as I said, these -- the methodology in
16
       rules language appears on -- beginning on Page 17 of that
17
       filing.
18
                         CHAIRMAN HONIGBERG: Now, that's -- much
19
       of this comment, much of this language is really about the
20
       methodology. There are specific numbers in there. And, I
21
       know, from other comments received, that people had
22
       different thoughts on what the number should be for
23
       what -- how many dBA is appropriate. Am I right about
24
       that?
```

1	MR. WIESNER: That is the siting
2	criteria specification, which appears on the next page of
3	the summary Comments Summary List. There is one other
4	comment that might from EDP Renewables, which goes to
5	study methodology, and that's what appears in the
6	right-hand column of Page 9 in the Summary List. Which is
7	essentially "how far out do you go in studying sound
8	receptors?"
9	VICE CHAIRMAN BURACK: And, Attorney
10	Wiesner, to your recollection, was there any consensus on
11	that topic of the measurement distance out? Because I am
12	seeing, actually, as I look in this Table 1.a of the SB 99
13	Report, under "Pre-construction baseline survey", it does
14	suggest "Measurement locations should be conducted at the
15	nearest properties from proposed wind turbines
16	representative of all non-participating residential
17	properties within two miles." And, there's also, under
18	the "Preconstruction Predictive Modeling", there's also a
19	"two mile" distance suggested there. But what you're
20	saying is that EDP Renewables is well, they're
21	specifically pointing to a "35 dBA sound contour line one
22	mile".
23	MR. WIESNER: That's correct. So,
24	that that does differ in that respect, from the

1 methodology that's otherwise presented as a consensus 2 position of the acousticians. 3 VICE CHAIRMAN BURACK: And, if I may, I 4 quess I'm trying to understand, I'm not schooled or versed 5 in this area of sound or noise measurements. So, I don't 6 know if these are mutually exclusive of each other or 7 whether these concepts of a "35 dBA sound contour line at one mile" would also be consistent with doing 8 9 measurement -- having measurement locations or doing 10 predictions out to two miles. Do you know? 11 MR. WIESNER: I don't think -- I'm not 12 really able to shed any light on that. 13 CHAIRMAN HONIGBERG: But, in terms of 14 the broad methodological concepts, really, the only issue seems to be that mileage line for the approach, for the 15 16 method that they're going to use to measure that. 17 MR. WIESNER: I believe that's correct. 18 COMMISSIONER SCOTT: I'm comfortable 19 with the two miles that are proposed in that section. 20 CHAIRMAN HONIGBERG: Director Muzzey. 21 DIRECTOR MUZZEY: In the EDP comments, 22 was there any reasoning given for dropping from two to 23 one? Was there a specific justification? 24 MR. WIESNER: There's a -- in the EDP

```
1
       comments, there's a reference to a 2011 NARUC Report --
 2
       NARUC, excuse me, "Assessing Sound Emissions from Proposed
 3
       Wind Farms & Measuring the Performance of Completed
 4
       Projects". And, if you have those comments of EDP
 5
       Renewables, this appears on Page 4.
 6
                         CHAIRMAN HONIGBERG: If you're going to
 7
       read, read slowly for Mr. Patnaude.
 8
                         MR. WIESNER: I'm sorry.
 9
                         VICE CHAIRMAN BURACK: And, would you
10
      please give us the date of those comments?
11
                         CHAIRMAN HONIGBERG: You can assume
12
      March 23rd, unless somebody tells you otherwise.
13
                         MR. WIESNER: Yes.
14
                         VICE CHAIRMAN BURACK: Okay. Thank you.
15
                         MR. WIESNER: So, there's a reference to
16
       that NARUC Report, 2011. And, there's also a reference to
17
       the Groton Wind Project that received a certificate at
18
       this Committee, and their sound study was modeled "on a
19
      map out to 35 dBA sound contour line or to all residences
20
       within at least one mile of every wind turbine". And,
21
       again, the closer distance to the turbine. And, that was
22
       deemed "acceptable to the Committee", according to EDP.
23
                         CHAIRMAN HONIGBERG: Attorney Iacopino,
24
       I have a question.
```

```
Yes, sir.
 1
                         MR. IACOPINO:
 2
                         CHAIRMAN HONIGBERG: The EDP comments
 3
       cited the Groton Wind decision for one mile for this
 4
       issue. Do you know if there are other precedents of the
       SEC on this topic?
 5
 6
                         MR. IACOPINO: Yes.
                                              I believe that in
 7
       every wind --
 8
                         MR. WIESNER: If you could use a
 9
       microphone, so people in the back can hear you.
10
                         MR. IACOPINO: Yes. Every wind docket
11
       that we've had, there's been some kind of sound
12
       measurement level. I don't know that it has the contours
13
       like you're discussing, one mile out, whatnot. Generally,
14
       it has been to the nearest residence -- not "to the
15
       nearest residence", but "at any residence", I think is the
16
       way that they have been listed in the past. And,
17
       generally, that's been in the 45 dBA range.
18
                         Lempster had a -- the Lempster Wind had
19
       a substantial package of mitigation that the applicant was
20
       required to offer to residents whose -- I believe it was
21
       at the exterior wall of their home where the dBA
22
       measurement was in excess of what was in the order,
23
       including things like installing air conditioners and
```

whole house fans, things like that.

After Lempster, which was the first wind decision, I don't believe that the Groton Wind [Granite Reliable?], although I think there were some dBA limits in there, I don't believe that it was a big issue because of the remoteness of that project. Groton does have — the Groton Wind Project did have some sound level requirements. And, then — well, Antrim Wind, there was discussion, but Antrim Wind was eventually denied for other reasons.

But, as far as — I think what you're

But, as far as -- I think what you're talking about is contours a mile out, two miles out. I don't believe that that's the rubric that the Committee has used to date, when it comes to wind facilities.

CHAIRMAN HONIGBERG: What's your pleasure? Does anybody have a pleasure on this? Yes, Commissioner Scott.

Statement, I would -- obviously, we have our own jurisdiction here, but I would like to lean, all things being equal, I would lean toward the recommendations, to the extent there is consensus, in the SB 99 Report. There was a lengthy process there, I think a lot of stakeholders involved, a lot of good work done. Which is, frankly, why I was suggesting that I'm comfortable with two miles for

```
1
       this. Again, that doesn't mean we have to do anything
 2
       within that two miles. This is talking about predictive
 3
       studies. So, it doesn't mean anything is thrown out
       because of that. I would assume there's additional costs
 4
 5
       that are associated with doing additional studies. So, I
 6
       am appreciative of that.
 7
                         CHAIRMAN HONIGBERG: Commissioner
       Burack.
 8
 9
                         VICE CHAIRMAN BURACK:
                                                I also am
10
       comfortable with two miles, at least from the standpoint
11
       of getting a pre-construction baseline survey and
12
       predictive modeling done. Because I think that will allow
13
       all parties to have a better understanding of what the
14
       potential impacts may be of a facility, and what -- again,
15
       what the baseline conditions are before such a facility is
16
       built. In the long term, I think that's going to be
17
       helpful to all concerned. So, I'd be comfortable with
18
       following the general recommendations that appear in here
19
       in the SB 99 Report.
                         CHAIRMAN HONIGBERG: Any other thoughts?
20
21
                         (No verbal response)
22
                         CHAIRMAN HONIGBERG: All right. We'll
23
       work with that as a working consensus for now.
24
                         The next item is the "Noise Level Siting
```

```
1
       Criteria", which is related, obviously.
                         (Short pause for members to review
 2
 3
                         comments provided.)
 4
                         CHAIRMAN HONIGBERG: Anyone have any
 5
       thoughts on this they'd like to share? Commissioner
 6
       Scott. Oh, I thought I say your hand going to the button.
 7
       Was I wrong?
 8
                         COMMISSIONER SCOTT: I would be glad to
 9
       speak, Mr. Chair.
10
                         CHAIRMAN HONIGBERG: Commissioner Scott
11
       is going to buzz in here. Yes, Commissioner Scott.
12
                         COMMISSIONER SCOTT: I will say, and
13
       Attorney Iacopino mentioned that in Lempster we, and I
14
       think he characterized it very well, as far as we
15
       presented a package of scenarios where at the --
16
       effectively, at the wall of your residence, if there was a
       certain level, then certain mitigation could happen.
17
18
                         Generally, I'm receptive to the comments
19
       we've gotten that, just because it happens not to be
20
       your -- the wall of your abode that you reside in, do I
21
       not get to enjoy my property anyways? And, to the extent
22
       that a noise level is a nuisance to a property owner, I'm
23
       compelled by that. So, you know, whether it's your
24
       cookout on our patio or your pool.
```

So, I'm less strong on that than I was when we did the Lempster, because I was part of that.

But, having said that, and I'm not giving you an answer here, is I think at least my thinking at the time for Lempster was there was an issue for enjoyment of your property, but there's also an issue for — a lot of the concerns we had where people were suggesting they wouldn't be able to sleep, they wouldn't be able to — again, the more persistent concern in your house. So, that was, just for context, that was some of the thinking, anyways, at least that I had.

And, also, while I'm speaking, in my view, we also need to make a differential between the absolute sound level and the gradient between the background sound levels and the impact of the project.

So, obviously, if you're in a high urban environment, and you're near a highway, that background level actually may exceed these. So, that that should mean, obviously, you can't have a -- put something that makes less noise in that area, that I think is counterintuitive. So, I think there needs to be that concept baked in also. You know, what increment are you adding to that, I think is important to understand.

So, that doesn't -- that is meant to be

```
1
       more educational, at least from my thoughts, than
 2
       anything.
 3
                         CHAIRMAN HONIGBERG: Well, then,
 4
       continuing with the educational aspect, I mean, the SB 99
 5
       Report does list the history --
 6
                         (Physical interruption - coughing.)
 7
                         VICE CHAIRMAN BURACK: You want me --
                         CHAIRMAN HONIGBERG: Why don't you pick
 8
 9
       that up, pick that sentence up.
10
                         VICE CHAIRMAN BURACK: I'll pick up for
11
       you, I'll try to read your mind, Mr. Chairman. I think
12
       what you were referring to was Table 1.d in the SB 99
13
       Report that cites the noise limits by project, for the
14
       Lempster Wind, Granite Reliable, Granite [Groton?] Wind,
15
       and Antrim Wind Project. And, effectively, what we see is
16
       different approaches taken in each of those different
17
       matters. And, what strikes me about that is that I think
18
       it will be very challenging for us to adopt a
19
       one-size-fits-all standard here. My sense is that this is
20
       very much a locational issue, in the sense that, if you
21
       have a project that is very remote, such as the Granite
22
       Reliable Project is, and, as it turns out, the SEC did not
23
       specify any noise standards there at all for that project.
```

And, again, there are no residences within, as I

understand it, many miles of that site. And, so, at least from the standpoint of protecting the human populations from noise there, that was not a concern.

Likewise, from looking at both the

Groton Wind and the Antrim Wind Projects, there there were

differentiations made between daytime and nighttime noise

levels. And, in one of those matters, the Groton Wind,

there was a separate standard set for a campground, which

would be more of that constant outside experience that

people would have, where you don't have the benefit of

walls of a building to, presumably, to buffer any noise.

So, I think we ought to be looking at something that -- a standard that recognizes that different locations may warrant different levels of protection or controls on noise. And, so, that's just one thought I have.

And, then, the other thought is that it would appear that different daytime versus nighttime standards, in settings where there are residences or other facilities near by that would be affected by the noise, at night, ought to have the benefit of a lower nighttime standard.

CHAIRMAN HONIGBERG: Other thoughts?

Considerations?

```
1
                         COMMISSIONER SCOTT:
                                              I have a --
                         CHAIRMAN HONIGBERG: Commissioner Scott.
 2
 3
                         COMMISSIONER SCOTT: So, Commissioner
 4
       Burack, on your last statement, again, just to help my
 5
       thinking, maybe you can help me in my memory. So, we've
 6
       differentiated in the past a difference between daytime
 7
       and nighttime. And, I guess I'm trying to remember why we
       did that. Is it the presumption that nighttime is
 8
       typically sleeping time, and that's when -- when it would
 9
10
       be more of a concern? Maybe you could help me with that.
11
                         VICE CHAIRMAN BURACK: Again, having not
       sat, personally, on any of these wind siting projects, I'm
12
13
       not aware of the details of it. Perhaps Attorney Iacopino
14
       could help us, give us a general understanding of what the
15
       concerns or issues have been raised in that context?
16
                         MR. IACOPINO: Yes. Although, all the
17
       various adjudicatory proceedings blend into one in my
18
       mind, I do recall, in the Lempster and in the Groton Wind,
19
       there being concerns about nighttime noise.
20
       particularly -- some particularly passionate testimony in
21
       Groton Wind from the owner of the campground about how it
22
       would affect her business there.
23
                         In Lempster, similarly, there was
24
       testimony about requiring lower noise levels in the
```

1 evening, at night, so that people could sleep. was -- it was generally that's when people are normally 2 3 asleep. I think that that was the general criteria that 4 underlied those decisions that were made by the Committee at the time in each of those dockets. 5 6 CHAIRMAN HONIGBERG: Commissioner 7 Burack. VICE CHAIRMAN BURACK: Thank you. 8 If I 9 may? Was there also testimony or evidence to the effect 10 that, overall, and I may not be using the right term, but 11 ambient or background noise levels tend to be higher 12 during the day, just because of vehicle traffic and other 13 kinds of activities, industrial activity or whatever else 14 that may be occurring, as compared to nighttime? Did 15 you --16 MR. IACOPINO: I don't recall that being 17 the subject of much testimony. It may have been, I

MR. IACOPINO: I don't recall that being the subject of much testimony. It may have been, I don't -- I just don't recall. But I do recall that each of the -- or, where you have imposed noise standards, they have generally had a limit, and then an "or not greater than" a certain amount above ambient. And, that was, in fact, the case in Lempster, and I believe in Groton as well, off the top of my head.

18

19

20

21

22

23

24

VICE CHAIRMAN BURACK: One other thought

```
1
       does occur to me, a non-wind matter that the SEC heard
 2
       several years ago was a pipeline expansion with a
 3
       compressor station, --
 4
                         MR. IACOPINO: Yes.
 5
                         VICE CHAIRMAN BURACK: -- in was it
 6
       Windham? Am I recalling that correctly? Somewhere in
 7
       that part of -- Londonderry perhaps?
                         MR. IACOPINO: I think it's Plaistow.
 8
 9
                         VICE CHAIRMAN BURACK: Plaistow? Okay.
10
                         MR. IACOPINO: Pelham. Pelham.
11
                         VICE CHAIRMAN BURACK: Pelham.
       you. I think that's right. I recall now that there was
12
13
       some discussion of noise matters in that -- noise issues
14
       in that matter, but I don't recall how the Committee
15
       resolved those or addressed those.
16
                         MR. IACOPINO: I don't, off the top of
17
      my head, but I'll try to check for you right now.
18
                         VICE CHAIRMAN BURACK: Well, thank you.
19
       It may be helpful to look at that as well. Because,
20
       certainly, these issues of noise arguably are applicable
21
       not only to a wind facility, but potentially at other
       kinds of facilities as well. As we're going through these
22
23
       rules, we probably need to be thinking about to what
24
       extent some of these standards may appropriately apply to
```

```
1
       other types of facilities.
 2
                         MR. IACOPINO: Mr. Vice Chairman, I
 3
       would also point out, I believe it was addressed in the
       wood-burning plant in Berlin as well, I believe we
 4
 5
       addressed noise.
 6
                         VICE CHAIRMAN BURACK:
                                                Thank you.
                                                             So,
 7
       again, it may be instructive to look at what we did there
       as well.
 8
 9
                         CHAIRMAN HONIGBERG: Commissioner Scott.
10
                         COMMISSIONER SCOTT: So, rounding back
11
       to my question to the Vice Chair, I was really thinking
       out loud. But I think, generally, obviously, most people
12
       sleep at night. But, to the extent this is a broadbrush
13
14
       rulemaking we're talking about, obviously, there are those
15
       who sleep during the day. They're on shifts work or
16
       whatever. So, I do think that is a consideration.
17
                         Having said that, again, I think the
18
       real key here is the increment above ambient levels that
19
       helps that. But, and again, just thinking out loud.
20
                         CHAIRMAN HONIGBERG: I mean, it seems to
21
       be a fairly common, if not constant, approach, that it's a
22
      maximum or the amount above the ambient, because it
```

accounts for both scenarios. And, it does seem to make

some level of sense whether, and I think -- well, I forgot

23

who it was, it might have been Commissioner Burack said at the beginning, this is always going to be fact-specific, because you're always going to be in a different place that might have different circumstances around it. But, you know, maybe there should be a maximum, or you should be dealing with the level above ambient.

And, if, for some reason, in a particular application, that doesn't make sense, that's when the request for a waiver would be appropriate.

Commissioner Scott.

aside, the issue of where to measure, I am frankly leaning towards the property line generally, rather than at the wall, exterior wall of a permanently occupied building. I guess, again, the context we're talking fairly broadbrush rules here applying to everybody. I'm struggling with either just at the property line, which is probably cleanest, or, failing that, but I think it gets very complicated, putting in a lot of caveats. You know, so, if you have a pool, if you have a patio, you have, you know, a dog walk, I guess, whatever, and I don't know how to do that and capture everything appropriately. So, I'm leaning towards perhaps just the property line is where you measure.

CHAIRMAN HONIGBERG: Ms. Weathersby.

MS. WEATHERSBY: Just kind of going back to the approach we just did on the noise level, it could be something like the lesser of the wall of the house or within, say, 200 feet. You know, if someone has 25 acres, you don't want it necessarily to be the property line. But you definitely want to protect people who are out gardening, etcetera. So, you know, do some kind of an either/or approach.

CHAIRMAN HONIGBERG: Director Muzzey.

DIRECTOR MUZZEY: I was also looking for some sort of qualifier in the case of very large properties, 200-acre farms, that type of thing. Is it the same in the back of a woodlot as it is next to -- next to a house? And, I couldn't think of a good way of differentiating that as well.

But what I do remember hearing, in the case of the Antrim Project, in some of the jurisdictional hearings, is that some people chose to live on large properties because of the rural nature and the quiet that those properties provided. So, I'm hesitant to even think of something as small as a 200 foot buffer, because some people have a much larger view and use of their property than just however many hundred feet, you know, we could

1 think about.

CHAIRMAN HONIGBERG: This is an ignorant question regarding sound, but is there a significant difference in the sound level 200 feet away? I mean, if you've got a loud thing near you, 200 feet isn't going to help you very much, I don't think. So, either measure from the buildings, just make it consistent, or measure from the property lines. I don't know. If you try and do anything else, you're making, I think, an arbitrary guess.

Mr. Oldenburg.

MR. OLDENBURG: I guess I can offer a slight indication of that is, at the Department of Transportation, we do a lot of sound wall analysis to mitigate for roadway noise. A lot of the information that we have is a lot of people like putting tree buffers in between the road and their home. You know, they're looking for trees. And, 100 foot of thick tree growth virtually does nothing to mitigate sound noise from a road. I'm not sure that's the same as noise from a wind farm. It's not until you get over about 100 feet thick of forest that you would actually see a sound deadening.

But we also, you know, we're talking, just for knowledge, we're talking that we don't even look at noise below 60 decibels. You know, road noise is,

```
typically, that's the ambient background noise of the
 1
 2
             And, the mitigation that we're talking is probably
 3
       about the same, five decibels, if we put up a wall. Below
 4
       that, it's hard to distinguish the difference. You know,
 5
       the human ear, you know, three decibels is almost an
 6
       indistinguishable noise level.
 7
                         So, trees, like you said, if you had
       25 acres or 100 acres, that would probably deaden the
 8
 9
       noise. You know, if you're an acre lot, and there's not a
10
       lot of trees on it, you know, that difference from the
11
       property line to the house, my thought is probably isn't
       going to -- isn't going to make any difference. But
12
13
       that's sort of the experience we have at Transportation.
14
                         CHAIRMAN HONIGBERG: No, that's helpful.
15
       Other thoughts? Comments? Commissioner Burack.
16
                         VICE CHAIRMAN BURACK:
                                                Just want to
17
       follow up and make sure we understand that, because that's
18
       very helpful information to have.
19
                         So, Mr. Oldenburg, you're saying that
20
       typical ambient noise or standard noise coming from a
21
       roadway that has regular traffic on it is 60 dBA
22
       approximately?
23
                         MR. OLDENBURG: Well, that's where we
24
       would start to look at mitigation. If it's higher than
```

1 60, like if you were sitting next to the interstate, a 2 busy interstate, not Littleton, but Salem, you would 3 probably be over 60. And, that would -- that would start, 4 well, we would consider that would start interfering with 5 being able to hear someone in your background, on your 6 deck. It would be a noise that would be bothersome to you 7 if you, you know, had a gathering on your deck or something like that. 8 9 Below that, we use federal standards. 10 That, below that, we wouldn't even review it, review that. 11 VICE CHAIRMAN BURACK: Thank you. 12 That's helpful to understand. 13 CHAIRMAN HONIGBERG: Attorney Iacopino. 14 MR. IACOPINO: Thank you. Just to 15 answer Vice Chairman Burack's request before. On the 16 Tennessee Gas Concord Lateral Project, which is the one 17 that had the compressor station down in Pelham, we did not 18 actually put a decibel limit on that compressor station, 19 because there was already a FERC limit of 55 dBA. 20 did do was the Committee considered the design features 21 that were presented to the Committee, and considered data that indicated that it would produce a sound level of 46 22

to 48 dBA, and required the Committee -- required the

applicant to use those design features. And, we were

23

dealing with a FERC limit.

There was a noise complaint in that particular docket after the construction of the facility. A sound survey was done. And, the Committee found that the -- that the facility was operating within the FERC limit. So, I think the shortcut answer to that is we essentially adopted the FERC limit for that particular project.

On the Berlin BioPower construction of the wood-burning facility, which was in the middle of Berlin, New Hampshire, the noise requirements were a little bit different. They were 70 dBA in the daytime at the property line of the facility, is the way that we — is the way that we set that one up, and 60 dBA at the property line of the facility at nighttime. So, we did make a daytime/nighttime distinction. And, in that particular case, it was noted in our decision that those — that those noise levels were within an ordinance that had been passed by the City of Berlin.

So, in those two, and they're both non-wind cases, we did something a little bit different than what we've done in the wind cases.

CHAIRMAN HONIGBERG: All right. Any other thoughts or comments? Suggestions with how to deal

1 with this? Director Muzzey. 2 DIRECTOR MUZZEY: I have a question 3 regarding the use of "8:00 a.m. to 8:00 p.m." versus 4 "day/nighttime". That seems to be another change that the 5 commenters suggested. Is that something we need to 6 discuss or think of changing? 7 CHAIRMAN HONIGBERG: I think we can certainly discuss. You've identified it as something that 8 9 there doesn't seem to be agreement on the language. 10 DIRECTOR MUZZEY: Well, I often lean 11 toward a clearer standard. And, certainly, "8:00 a.m. to 8:00 p.m", it's very clear as to when day begins and night 12 13 begins. If we go by the presence of daylight, that, of 14 course, changes throughout the year. And, we have long 15 days right now. 16 So, unless there is a compelling case 17 otherwise, I would feel that being more specific about 18 those times would be more helpful to everyone involved. 19 CHAIRMAN HONIGBERG: Commissioner Scott. 20 COMMISSIONER SCOTT: I agree with that. 21 And, my other concern, if we went just "sunrise to sunset" 22 for the standard, I think some of the intent of this, as 23 we discussed, is to accommodate that the majority of the

citizenry sleep at night. And, as you're aware, sometimes

```
1
       during the year the Sun could be rising, depending on
       where we are, for Daylight Savings Time, it's relatively
 2
 3
       early. And, if the Sun rises, for instance, at 5:15, if
       it's a weekend, I'm not -- I'm likely not to be wanting to
 4
 5
       wake up at that time.
 6
                         So, I think -- so, my presumption is
 7
       that was the -- some of the reason for the "8:00 a.m. to
       8:00 p.m", that was to accommodate sleep cycles as much as
 8
 9
       anything else, less than when the Sun comes up and comes
10
       down.
11
                         CHAIRMAN HONIGBERG: I see no appetite
       for further discussion of this.
12
13
                         VICE CHAIRMAN BURACK: Mr. Chairman, I
14
       mean, do you want to -- are you going to propose a
15
       specific dBA level for the daytime, the 8:00 a.m. to
16
       8:00 p.m., with an ambient -- an amount above ambient as
17
       an alternative to that? Do you want one of us to do that?
18
       What are you looking for here?
19
                         CHAIRMAN HONIGBERG: I would -- if
       someone has a proposal to make, that would be wonderful.
20
21
       Director Oldenburg.
22
                         MR. OLDENBURG: I quess I don't want to
23
       cloud the issue too much. But, when you think about it,
```

if you have a facility that operates, be it a wind farm or

an energy plant, it's -- I think of it, it's going to operate with a certain noise day and night. So, really, if you have a different standard for day and night for noise level, I got to believe that that's like operations, trucks, things like that. I live near Merrimack Station, and they have a moratorium on when they can load the coal trucks and things like that.

So, I don't -- is the expectation that the facility has the ability to lower the noise level at night? Like, do they turn the turbines -- some of the turbines off or do they stop doing some activity to be able to regulate that? Or, is it all on or all off? So, if we're putting a difference from the energy facility, is it ultimately going to be the lowest number that they're going to have to meet, because they can't regulate their noise beyond that?

And, so, I think -- I don't know if there's a difference. Is it the operation is the noise or is it daytime work activities, with backup buzzers and bigger trucks or something else that they can actually regulate the noise on? So, I don't know -- I don't know how the facility can regulate their noise, I guess, from day to night. If we're putting undue --

CHAIRMAN HONIGBERG: Well, I think that,

Τ	Just 100king at the summary of the way new hampshire wind
2	Watch and EDP Renewables, both, in one way or another, I
3	think acknowledge what you just said, because they don't
4	actually make a distinction. I think EDP Renewables has
5	the measurement point at night. They don't say anything
6	about a different time, different level during the day.
7	And, I think that Wind Watch also I don't think makes any
8	distinction, it's just a level. They're different levels,
9	but they're both ultimately, I think, agreeing with you,
10	that you set a level, and that level is going to be the
11	level for wind projects. I may be misreading the
12	comments. It wouldn't be the first time.
13	MR. WIESNER: I believe EDP does propose
14	a differential between day and night, based on prior
15	precedent at the Committee for wind farms, which are
16	actually constructed and existing in the state.
17	CHAIRMAN HONIGBERG: Okay.
18	MR. WIESNER: And, that's the 55 and 45
19	that appears in the right-hand column of this document.
20	CHAIRMAN HONIGBERG: Oh, you're right.
21	You're right. There is a difference. Without the color,
22	it's sometimes hard for me to tell what's still alive and
23	what's not.
24	MR. WIESNER: And, you know, my

knowledge of this is very limited, but I believe there are operating strategies that could be pursued to mitigate noise levels at different times. And, I think that's the genesis of the common differential between nighttime and daytime noise limits.

CHAIRMAN HONIGBERG: Commissioner Scott.

COMMISSIONER SCOTT: Here's my proposal:

On the draft language, I think I would keep the existing times, keep the existing decibel limit, the existing increment above ambient. And, I'm sorry, I'm referencing the Draft, Site 301.14(f)(2)a. However, I think I would, as I suggested earlier, change the requirement, delete the language about "exterior wall", and what I think I'd like to see is just go to the property line, with some exception — basically, what I'd like to see is some differential for non-commercial property, unless it's commercial, which, and I don't know the language here, you know, campgrounds, hotels, Bed & Breakfasts, some carve-out. So, it would be at the property line for non-commercial and those type of exemptions. That's what I'd be more comfortable with.

Again, so, if it's an auto body shop, I don't think I'm as aggrieved by anything else. It's more the residential and businesses that are focused around

1 people sleeping, I guess. 2 CHAIRMAN HONIGBERG: Director Muzzey. 3 DIRECTOR MUZZEY: I would agree with all 4 of your points on that, with the exception of the last 5 one, which is really a very difficult thing to carve out. 6 Given the importance of the tourism industry in New 7 Hampshire, I would hesitate to venture into the realm of 8 "commercial", given that so many of them -- of our 9 commercial enterprises do relate to tourism. I don't have 10 a good substitute for that. 11 COMMISSIONER SCOTT: How about if I use 12 the world "industrial", instead of "commercial"? 13 DIRECTOR MUZZEY: As long as there is a 14 clear definition similar of what an "industrial property" 15 is, whether that's coming from local zoning or some other 16 status, I don't know. But I would be more comfortable 17 with "industrial" than "commercial". 18 CHAIRMAN HONIGBERG: Ms. Weathersby. 19 MS. WEATHERSBY: I think you run into a 20 little bit of trouble with that approach in that uses can 21 change. What is a campground now may become industrial, 22 and vice versa. And, so, if you plan for the project on X 23 date, five years later it could really have a negative

impact on someone trying to sleep.

1 CHAIRMAN HONIGBERG: Commissioner Scott. 2 COMMISSIONER SCOTT: So, what I'm trying 3 to articulate is that, and maybe just the property line 4 period, but let's say I'm a -- I own huge tracts of land, 5 for foresting, let's say. So, I own hundreds and hundreds Should they be, and there's no buildings, 6 7 nobody is staying there, etcetera, do we want to hold that 8 same standard to if it's your backward? It's an open 9 question, but I quess that's -- because my concern is, if 10 we just say "property line", it doesn't matter at that 11 point. Cleaner, perhaps. And, I quess we have to decide 12 what our goal here is. DIRECTOR MUZZEY: Well, certainly, we've 13 14 heard some information from Bill that trees do serve a 15 buffer for sound, when they're in large enough quantities. 16 So, I immediately thought in my mind that, if you had 17 large tracks of forested land, that they would serve as a 18 natural buffer for sound hopefully. 19 COMMISSIONER SCOTT: But, again, I think 20 that's why we have used in the past the side of the 21 building, effectively, to get around all that. That was 22 the other end of that, that's the simplest way on that 23 end, I guess.

DIRECTOR MUZZEY: Although, we did

```
1
       receive a lot of comments requesting a change to "property
 2
       line".
 3
                         COMMISSIONER SCOTT: Correct.
 4
                         CHAIRMAN HONIGBERG: Commissioner
 5
       Burack.
 6
                         VICE CHAIRMAN BURACK: I don't mean to
 7
       complicate this any further than it already is, but I
 8
       agree with much of what Commissioner Scott suggested here,
       which I think is consistent with the language that is in
 9
10
       this Draft that, is it 301.14(f)(2), subpart a.
11
                         But we do have this issue of
12
       non-participating landowners versus participating
13
       landowners. We also have the challenge that this language
14
       here makes reference to "existing occupied buildings", and
15
       we don't have a definition of what is or is not an
16
       "occupied building". So, I think we're going to need to
17
       define that.
18
                         I guess I'm assuming that, by an
19
       "occupied building", we meant a residence of any type.
20
       But it could be a facility that's used for any purpose
21
       that has people in it regularly.
22
                         And, Attorney Wiesner, I don't know if
23
       you had any particular thoughts on what that means?
24
       I'm wondering whether we need to go to this
```

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

industrial/commercial issue, given that it appears we're going to have this overlay. And, I believe we agreed last time of defining what it means to be a "participating landowner" in a project and requiring disclosure of where those lines are, effectively, by disclosing who is a participating landowner that, I assume, has an agreement with a party to accept some particular imposition on their property rights otherwise.

MR. WIESNER: It sounds like we may be moving in a direction where we're going to look at the property line, but we're also -- there is some sense that perhaps how that property is used is relevant for what level should apply or whether any level should apply. And, I guess I would raise the issue of "what if it's a vacant lot?" If someone owns the property, maybe they're not participating, but there's no occupied structure on that property. So, should those sound limits even apply then? Or, should that be a matter for a waiver request by the applicant, to say "even though my study shows that this property will have sound levels which may exceed the limit, please disregard that, because it's currently not occupied." Then, to Director Muzzey's point, I think that that change -- that property usage may change over time and someone may move in.

In terms of commercial/industrial, I guess one way to distinguish it perhaps might be, and I don't know exactly how to do this definitionally, but, if it's a property where people sleep at night, if it's used for residential purposes, even if it's temporary, overnight residential purposes, in the nature of a campground or a B&B, maybe that's subject to, you know, a lower nighttime limit, which would not apply if it's used for an auto body shop, which is only being used during the day.

So, I'm probably just muddying the waters further, but that's, you know, I think we run into a number of issues regardless of how we approach this.

And, I'm not sure the "occupied building exterior wall" was the best way to go. But designating the property line doesn't necessarily relieve us of considering these other questions as well.

CHAIRMAN HONIGBERG: Director Muzzey.

DIRECTOR MUZZEY: Given that we're considering noise in this discussion, perhaps we don't need to further distinguish as to industrial, commercial, sleeping or non-sleeping, but we could potentially allow the concept of ambient levels of noise make that differentiation for us. If it's an industrial property,

it may be — it may be noisy. Certain types of industry,

of course, are not noisy at all. And, if we continue to

have some sort of consideration of the ambient noise, then

maybe that's enough to differentiate between properties

that are very affected by a new facility, versus not so

much.

CHAIRMAN HONIGBERG: That makes sense to

CHAIRMAN HONIGBERG: That makes sense to me. Commissioner Burack.

VICE CHAIRMAN BURACK: Well, we're still going to need a point at which the test or the measurement can be done to both get the baseline background to do predictive modeling, and ultimately to determine whether or not a facility is or is not compliant. And, so, we are going to have to designate effectively a point of compliance. It's the same issue we have when we're monitoring air quality, for example. What is the point of compliance? Is it at the top of a smokestack or is it at the boundary line of a facility?

I'm inclined to think that the place to measure, as a general matter, is at a property line. But I'm -- as I'm reading this language here, it refers to "non-participating landowner's property line if it is less than 300 feet from an existing occupied building." I think this is coming more to Attorney Weathersby's

```
1
       comments about providing some kind of a -- of a zone there
 2
       that is going to be protected, rather than necessarily
 3
       being right up at the exterior wall.
 4
                         CHAIRMAN HONIGBERG: So, if we can
 5
       define "occupied building", come up with -- that's not a
 6
       currently defined term, but it's built in here, then we
 7
       can essentially use the language that's here, can't we?
 8
                         VICE CHAIRMAN BURACK:
                                                I think we could.
 9
                         CHAIRMAN HONIGBERG: Other thoughts?
10
                         (No verbal response)
11
                         CHAIRMAN HONIGBERG: All right. Seeing
12
       none, let's move to the next issue. Off the record.
13
                         (Brief off-the-record discussion
14
                         ensued.)
15
                         CHAIRMAN HONIGBERG: Okay. We're going
16
       to take a break for ten minutes, come back at 25 minutes
17
       to 11:00.
18
                         (Whereupon a recess was taken at 10:25
19
                         a.m. and the meeting resumed at 10:43
20
                         a.m.)
21
                         CHAIRMAN HONIGBERG: We're going to
22
       continue with noise level. I thought we were done, but
23
      we're not.
24
                         Within the proposed rule, there was a
```

```
1
       provision that would -- that says "can't be exceeded for
      more than three minutes within any 60 minute period".
 2
 3
       And, there are a number of commenters who think that that
       should be removed. So, let's talk about that for a
 4
 5
       minute, or for three minutes. Commissioner Burack.
 6
                         VICE CHAIRMAN BURACK: Just as a
 7
       question for Attorney Iacopino. Have we, in any of our
       prior decisions, built in any exceptions of this kind, do
 8
 9
       you recall?
10
                         MR. IACOPINO: I want to say that back
11
       in the late '90s there may have been that kind of
       specificity in either the Newington energy facility or the
12
13
       AES Londonderry gas plants. I do recall that there were
14
       some specifics in those about pure tones and things like
15
       that. And, there may have been this, you know, hour
16
       limit, minutes per hour limit. But I don't recall in any
17
       of the -- and, certainly, I don't recall that in any of
18
       our wind cases. Now, that may have been in some of the
19
       sound studies that have been presented to you in the
20
       course of those proceedings, but I don't recall that --
21
       about that sort of limitation, those sort of criteria
22
       finding there way into an ultimate decision.
23
                         VICE CHAIRMAN BURACK: And, if I may, do
```

you have an understanding, and I simply don't recall from

the comments, what the rationale is that's given for including this kind of an exception? And, I notice that the comments from at least one of the industry groups leaves that language in, whereas the comments from New Hampshire Wind Watch takes it out, and then some others leave it in. So, I'm just trying to understand what's the -- what's the rationale here? Is it the trucks backing up issue? Is it that winds can be variable at different times, and so you may have occasional instances where winds just carry more noise farther? Do you have any sense of that?

MR. IACOPINO: I think the concern is for excessive noise over a short period of time that doesn't, if you measure the noise, you're measuring it over a longer period of time. And, that this is an additional limiter, so that there's not a excessive amount of noise for a short period of time. I think that's the rationale. I'm trying to -- I'm informed that we may have had something like that in the Antrim Wind decision, which I'm trying to pull up as we speak.

VICE CHAIRMAN BURACK: So, you're saying this — this is to protect against sort of excessive use of an averaging approach as a way of tolerating higher levels at some times and much lower levels at others?

1	MR. IACOPINO: Yes.
2	VICE CHAIRMAN BURACK: Thank you.
3	CHAIRMAN HONIGBERG: Attorney Wiesner,
4	did you want to say something? It looked like you were
5	pulling the microphone towards you at one point.
6	MR. IACOPINO: He was just trying to get
7	it away from me.
8	MR. WIESNER: Yes. And, I pushed it
9	back. I mean, this is a very limited tolerance for an
10	exceedance. And, it's possible that it's built into some
11	of the noise levels, in order to permit the facility an
12	opportunity to, for instance, implement whatever operating
13	changes might be necessary to reduce the noise level at a
14	given point in time.
15	CHAIRMAN HONIGBERG: Thoughts?
16	Comments? Director Muzzey.
17	DIRECTOR MUZZEY: I would again defer to
18	the SB 99 consensus findings, if it's mentioned there, to
19	go with that group's determinations.
20	CHAIRMAN HONIGBERG: Does anyone know
21	off the top of their heads if the SB 99 Group had that
22	within what was consensus? I don't see it. But I have a
23	question about the significance of the "weighted average"
24	or the "weighted equivalent sound levels". I mean,

those -- we are talking about a fluctuating sound level, are we not? And, it's the -- there's some sense it's going to be higher and lower, and that the average can't be exceeded, is that not right? And, then, this provides, to the extent that it is higher, it can only be higher for a very short period of time. If you removed that, would that not allow higher levels more, if, ultimately, the average is what we're talking about? Because, if it were quiet for long periods of time, would that not allow you to run at a much noisier level at other times? Can anybody answer that?

VICE CHAIRMAN BURACK: Well, first, I just would ask of, again, those who understand this better than certainly I think I do, are we, in fact, talking about averages here? When we're talking about an "A-weighted sound level", an "A-weighted equivalent sound level", are we talking about an average or are we talking about an instantaneous measurement?

DIRECTOR MUZZEY: I had the same question as well. Given that, Paragraph A, under sound standards, does not use the term "average". It says "During operations shall not exceed the greater of 45 dBA, or 5 above ambient level, between 8:00 and 8:00, and the greater of 40, or 5, at other times during the day."

1 I know that it's probably been practiced 2 in sound studies just to average out the sounds. But this 3 particular rule, as currently drafted, does not say "average". 4 5 CHAIRMAN HONIGBERG: Attorney Iacopino. 6 MR. IACOPINO: I think the term 7 "average" is probably the wrong term to be using. That's -- I don't think it's an "average", I think it's 8 9 a -- and I can't tell you exactly how the measurement is 10 made, but it is a measurement that they're talking about, 11 when you talk about the dBA level, it is measured over 12 time. And, that's why -- so that you could be -- I'm not 13 sure that it is an average, but there is some measurement 14 that is made. 15 I don't know, I'm not the engineer that 16 can make those sound level assessments. But I think that 17 this particular clause is in there for precisely to stop 18 if there is a loud noise for more than a period of time. 19 I did look at the Antrim order, and the 20 Antrim is the same as the other ones we've had. It's just 21 Whereas this language of "not to exceed" -- "not 22 to exceed exceedance levels for up to three minutes within 23 any 60 minute period" is not in there. 24 However, as I said before, I do recall

that, when these sound studies are presented to us, we often see sections of the sound study that address these types of issues, in the studies themselves.

CHAIRMAN HONIGBERG: Commissioner Burack.

VICE CHAIRMAN BURACK: And, to your recollection of those studies, when they talk about this issue, do they talk about specific factors contributing to these higher periods of noise? For example, is it this issue, as Mr. Oldenburg was saying, of backup alarms on vehicles that can cause a higher noise level for a short period of time or is it something else that's contributing?

MR. IACOPINO: My recollection, and I don't have any of the sound studies' estimates in front of me, but my recollection is that it's really something that comes from some of the various standards that the sound experts have brought before us, like the WHO guidelines and — the World Health Organization guidelines, the EPA levels guidelines. There's a number of those during various — at various times that are presented to us. And, my recollection is this type of language being used in explaining those various directives from social agencies.

1 VICE CHAIRMAN BURACK: What I would like 2 to ask then, is that Staff take a look at those documents 3 or the types of documents that Attorney Iacopino just 4 described, and see if there is a standard way in which 5 this issue is addressed. Whether it's by World Health 6 Organization or other recognized entities that have 7 studied this issue extensively. And, come back to us and tell us what, you know, how those other entities do 8 9 address this issue, if at all. 10 And, if there seems to be some sort of 11 standard approach within those, then we may want to adopt those. Otherwise, I could see us either staying with 12 13 what's here, again, if there seems to be some basis in 14 some standard out there. Or, alternatively, we leave it 15 out. And, this would be an -- if somebody feels they need 16 a waiver from this, they could seek a waiver and give us 17 reasons why, at a particular site, they need to be able to 18 exceed for some period of time, based on particular 19 site-specific factors or facility-specific factors. 20 CHAIRMAN HONIGBERG: Any other thoughts 21 or comments? 22 (No verbal response) 23 CHAIRMAN HONIGBERG: All right. Seeing 24 none, let's talk about shadow flicker.

And, again, we have, as we did with sound, we have a methodology consideration, and then a criteria -- criterion consideration. So, let's start with the methodology.

(Short pause for members to review comments provided.)

CHAIRMAN HONIGBERG: This is an area where the SB 99 Group identified certain areas of consensus, and didn't necessarily offer rules language, but did identify some issues in which there seemed to be agreement. I'm not sure if the language in the Initial

Proposal captured all of the areas of agreement. I

believe one of the commenters, identified as last name

as to what should be included. And, there are some other

"Watson", I think essentially quoted from the SB 99 Report

suggestions as well that we've received.

Commissioner Scott.

commissioner scott: Again, I'll start with more of a question for educational — for my education than anything else. So, when I look at the draft rule we have, which is I think 301.08(a)(2), I think, which is Page 10 of the Initial Proposal.

VICE CHAIRMAN BURACK: I'm sorry, what

24 was the citation again?

```
1
                         COMMISSIONER SCOTT:
                                              It's on Page 10 of
 2
       the Initial Proposal, the very bottom, I believe it's --
 3
       it's hard to follow the pagination here, but --
 4
                         CHAIRMAN HONIGBERG: It's 301.08(a)(2).
 5
                         VICE CHAIRMAN BURACK:
                                                Thank you.
 6
                         COMMISSIONER SCOTT: Thank you. So, if
 7
       we're all there? So, the very bottom of that page, I'm
       just questioning, and I think that's -- some of the
 8
 9
       comments have gone there. So, we have defining the "most
10
       conservative case scenario". And, so, one question I
11
       have, when I read that, is do we know what that is and how
       do you define the "most conservative case scenario"? And,
12
13
       we do give, which is commented on, we do give some, a
14
       little bit more guidance in the rule here, including the
15
       "astronomical maximum shading duration".
16
                         So, my question is, is, even independent
17
       of the comments, I suppose, is the "most conservative case
18
       scenario", is that -- are we providing enough guidance
19
       when we say that? What does that mean?
20
                         VICE CHAIRMAN BURACK: I believe that
21
       where that's addressed is actually in the SB 99 Area of
22
       Agreement that's described in Table 2.a there, that really
23
       talks about the "astronomical maximum (worst case) and
24
       anticipated hours per year of shadow flicker" for various
```

types of facilities, and also "roadways". Again, I'm putting aside for a moment the question of "what specific types of facilities we might address?" But I think that this term "astronomical maximum" seems to be an area of consensus. Although, certainly, we saw comments that suggest that conditions with the moon in the background should be considered, and also the comments from Mr. Ward suggesting that there may be other factors that could contribute, such as reflective snow, ice, and water surfaces, as well as brightness contrast issues, among others perhaps, that would also be important to factor in.

But what's — I think what's challenging

here is this is clearly an evolving area, an evolving discipline. And, it does not appear that there is a real sort of scientific consensus as to (a) what the real sort of issue is, and (b) then how to describe it and how to measure it. And, so, I think we're — that's the challenge that we have here.

And, certainly, we can see that, in Germany and in Denmark, you know, they have taken certain regulatory approaches there. But, again, they, you know, there doesn't appear to be a whole lot of consistency between those two approaches either.

So, that's -- that's the challenge we

```
have. But I do think, if we could focus on an
 1
       "astronomical maximum" notion, and then consider whether
 2
 3
       or not we want to build in moon or other factors, such as
 4
      Mr. Ward has suggested.
 5
                         CHAIRMAN HONIGBERG: Other thoughts?
 6
       Comments?
 7
                         (No verbal response)
                         CHAIRMAN HONIGBERG: People are
 8
 9
       pondering and reading, I think.
10
                         COMMISSIONER SCOTT: So, could I --
11
                         CHAIRMAN HONIGBERG: Commissioner Scott.
12
                         COMMISSIONER SCOTT: For the Vice Chair.
13
       So, would you -- is your suggestion, not to put words in
14
       your mouth, that, rather than say the "most conservative
15
       scenario", we just go right to the "astronomical maximum"?
16
                         VICE CHAIRMAN BURACK:
                                                Absolutely. I
17
       think the more explicit and the more specific we can be in
18
       this arena, the less likelihood is we're going to have
19
       disagreements as to what study is required, and then
20
       whether the study was done properly or not.
21
                         COMMISSIONER SCOTT: Well, I do think,
22
       in this case, we need to be more specific, I think.
23
       Because I think, otherwise, we'll end up with endless
24
       debate over what is "most conservative", I'd suspect.
```

```
1
                         VICE CHAIRMAN BURACK:
                                                Right.
 2
                         CHAIRMAN HONIGBERG: Attorney
 3
       Weathersby.
 4
                         MS. WEATHERSBY: I think it might be
       helpful, too, as it has been suggested, that we define
 5
       "astronomical maximum". So, we're all -- it's clear what,
 6
 7
       you know, that's a shading duration, and, you know, just
       define it so everyone understands it, because, you know, I
 8
 9
       didn't know what it was.
10
                         CHAIRMAN HONIGBERG: Commissioner Scott.
11
                         COMMISSIONER SCOTT: So, this section
12
       that we're discussing right now, my understanding is this
13
       is just what the report should evaluate. So, the comments
14
       kind of, well, not "kind of", they add a concept of "and
       how often". So, and again, I think it's important that we
15
16
       define, tell developers, tell the public what we're
17
       expecting here. Right now, the language is rather vague,
18
       just "Include a report evaluating the shadow flicker",
19
       etcetera. So, perhaps -- I guess we do have it here, at
20
       the very end, I missed, I apologize. So, we have the
21
       "maximum shading duration". Is that sufficient? And,
22
       there's also a thought in the comments about, for the
23
      modeling, "how far away is it modeled also?"
```

CHAIRMAN HONIGBERG: Director Muzzey.

1 DIRECTOR MUZZEY: The other difference 2 that I see from our current draft is, rather than using 3 the language of "all buildings occupied or used for 4 another purpose", we have a list of types of buildings, 5 and even including "roadways" and "public gathering areas (outdoor or indoor)". So, there were comments wishing to 6 7 make this more specific, instead of more general, as well as to the types of places this matters. 8 9 CHAIRMAN HONIGBERG: I mean, as I said, 10 that list of those specific titles that are in the Watson 11 comments, that is almost a verbatim --12 DIRECTOR MUZZEY: From SB 99? 13 CHAIRMAN HONIGBERG: -- from the SB 99 14 Report. I assume the indoor gathering areas would have to 15 have windows, in order for the shadow flicker to be 16 relevant to them? 17 DIRECTOR MUZZEY: Even we have two 18 windows. 19 CHAIRMAN HONIGBERG: Yes, Roger. 20 MR. HAWK: I'm having a little trouble 21 on the alternative proposed by Mr. Ward. There's a 22 comment about impacts on streets and roads. And, I'm 23 having trouble figuring out why that's even an issue? 24 mean, driving down a highway, and I -- take any non-summer

```
1
       season, when you have foliage on and off and you go by and
       there are shadows in the road. But what is that -- what's
 2
 3
       the importance of that? I don't get it.
 4
                         DIRECTOR MUZZEY: I would turn to our
 5
       representative from DOT, to see whether he has any
 6
       knowledge of this being a concern on roadways.
 7
                         CHAIRMAN HONIGBERG: Just before you --
       just while you're thinking about that, the Watson comments
 8
 9
       include roadways, but roadways are not, as I'm scanning
10
       the SB 99 Report, I don't think there is, at least aware
11
       of any.
12
                         VICE CHAIRMAN BURACK: The Item 2
13
       there, --
14
                         CHAIRMAN HONIGBERG: Oh, "roadway that
15
       falls" --
16
                         (Court reporter interruption.)
                         VICE CHAIRMAN BURACK: I'm sorry.
17
                                                            Ιn
18
       Table 2.a, at the end of Item 2 there, it reads "and
19
       roadway that falls within the study area."
20
                         CHAIRMAN HONIGBERG: Right. So, it is
21
       included.
22
                         VICE CHAIRMAN BURACK: Right.
23
                         CHAIRMAN HONIGBERG: And, that's in the
24
       areas of consensus from the SB 99 Group.
```

```
1
                         So, Mr. Oldenburg, is there an answer to
 2
       this question that you know of?
 3
                         MR. OLDENBURG: Our opinion, the less
 4
       shadow there is in the road, the better it is, because it
 5
       melts -- the Sun melts the ice better, but --
 6
                         (Laughter.)
 7
                         MR. OLDENBURG: I am not sure from that
                   I guess my only comment, not pertaining to the
 8
       statement.
 9
       roadway part of it is, there's a report that's going to be
10
       done. And, what is that report going to be used for?
11
       Everywhere else we have sort of limits, and that is, if
12
       the report shows that a house is going to be totally, you
13
       know, have flicker every day of the year, is there a
14
       criteria that has to be met for a "yes"/"no"?
15
       it's elsewhere, right?
16
                         CHAIRMAN HONIGBERG: Yes.
                                                    That's the
17
       301.14(f)(2) later in the document, --
18
                         MR. OLDENBURG: So, that's later. Okay.
19
                         CHAIRMAN HONIGBERG: -- has the
20
       placeholder for the standard. And, the next page of the
21
       summary sticks up the comments from various people about
       what that standard should be. How much --
22
23
                         MR. OLDENBURG: So, this is just what
24
       the report needs to contain.
```

CHAIRMAN HONIGBERG: Correct.

VICE CHAIRMAN BURACK: Again, I'm not schooled in this issue, but I would assume that the particular concern, with respect to shadow flicker on a roadway, would just be a safety concern of a constant or a very regular movement from light to dark, light to dark, and that's what I'm assuming is the issue here. But I don't recall seeing anything specific in the written comments that we received, or really seeing anything in the SB 99 Report, unless I missed it, that really describes what the specific nature of the concern is, if it's something other than that.

MR. OLDENBURG: I, from a Transportation standpoint, I can't -- not that I'm aware of. I mean, you can see it from day-to-day, as you drive down the road, either early in the morning or late at night, when the Sun is low, and you're driving down the road and the Sun is in the trees. And, you can see the -- you sort of go through almost a flicker as you pass by those trees and the shadows of those trees, and sometimes it's annoying, especially when it's from the side. But I don't know of anything that, from a Transportation standpoint, that we would look at with regards to that.

CHAIRMAN HONIGBERG: For me, it's

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

actually, that there was consensus in the SB 99 Workgroup that it is an issue, tells me that it's probably an issue. And, it's got to be safety. There's no other thing it could be, really.

MR. WIESNER: If I can just jump in, I'll note, this is looking at Table 2.a of the OEP Report that the Vice Chairman referred to, it appears that there was consensus that roadway -- that the effects in roadways within the study area of the potential shadow flicker should be studied. But, then, when he talk about limitations on shadow flicker, and this is in Bullet 3 in Table 2.a, it does not list "roadways". It just lists "residences, learning places, workplaces, health care settings, [and] public gathering areas (outdoor and indoor) ". And, the proposed rules contain the word "occupied building", which, you know, very well covers "residences, learning spaces, workplaces, health care settings", but doesn't cover "outdoor public gathering areas", because there would be no building, I guess, by definition.

So, it seems that there may not have been consensus that roadways need to be subject to a shadow flicker limit. Although, there was consensus, apparently, that they would be subject to the study.

CHAIRMAN HONIGBERG: Indeed, in the areas where there was not agreement in the Report, it notes that at least one suggester, in Table 2.b, the very last line, "whatever the limit, it should not apply to roadways", is what one — at least one person in that working group thought was the right answer with respect to roadways. It does seem that there is consensus that the Report should include it.

Director Muzzey.

of SB 99, it refers to "the study area". And, we do -- we have gone back and defined the "area of potential visual effect", although I'm not sure we have defined the "study area". And, so, I think we need to decide whether or not we want to put some sort of distance limit on where shadow flicker will be studied, or if we are just looking for a report that summarizes everywhere the shadow flicker may happen.

CHAIRMAN HONIGBERG: New Hampshire Wind Watch says "1.5 miles", Watson says "2 miles".

DIRECTOR MUZZEY: SB 99 says "the study area". And, as the rule is drafted, it just -- it doesn't say that. So, we are to assume that anywhere there is shadow flicker it's being reported in what's submitted

1 with the application materials. 2 CHAIRMAN HONIGBERG: I agree with you. 3 MR. WIESNER: That's correct. And, it 4 also is noted as an "area without agreement", in Table 2.b 5 in the OEP Report, "Distance at which shadow flicker is a 6 problem". And, you will often see in the literature "10 7 times rotor diameter width". But, then, alternatively, 8 there's "one mile", "6,200 feet", which is more than a 9 mile, or, you know, the assumption that it could be a 10 problem at any distance and should be subject to study 11 with respect to each particular location. 12 So, it seems that this is an area where 13 it may be difficult or at least a challenge to pick the 14 right distance and build it into the rules. 15 DIRECTOR MUZZEY: Although, as it's 16 drafted now, the language says "defining the most 17 conservative case scenario". So, we're back to that 18 language. And, if it's "most conservative", then anywhere 19 that the shadow flicker exists. 20 CHAIRMAN HONIGBERG: Probably. Does 21 anyone want to put a limit on or should we just stick with 22 what seems to say "wherever you can find it, you've got to 23 report it"?

DIRECTOR MUZZEY: Given no compelling

```
reason for the other distances, I would suggest that we
 1
 2
       leave the language as drafted.
 3
                         CHAIRMAN HONIGBERG: You want to grab
       "6,200 feet", as in Mason County, Michigan?
 4
                         DIRECTOR MUZZEY: Haven't been there.
 5
 6
                         CHAIRMAN HONIGBERG: Other thoughts or
 7
       comments on this?
 8
                         (No verbal response)
 9
                         CHAIRMAN HONIGBERG: Do we think we
10
       should add the more specific language that comes from the
11
       SB 99 Report?
12
                         DIRECTOR MUZZEY: That would be
13
       consistent with our other decisions today.
14
                         VICE CHAIRMAN BURACK: When you say "the
15
      more restrictive language", what are you referring to?
16
                         CHAIRMAN HONIGBERG: I didn't say
17
       "restrictive". I said "specific".
18
                         VICE CHAIRMAN BURACK: "More specific".
19
       Which language are you referring to?
20
                         CHAIRMAN HONIGBERG: Essentially, what's
21
       in Table 2.a.
22
                         VICE CHAIRMAN BURACK: Okay. Well,
23
       certainly, I think the language in Table 2.a, to the
24
       extent that it converts to regulatory language, would make
```

sense to -- would make sense to include. I guess I'm a little troubled by this notion of "you've got to identify shadow flicker wherever it may exist", because I'm just -- there must be a point at which it becomes sufficiently attenuated that it's really not an issue. And, I think we could -- we could make it very difficult for people to know what's appropriate and what's necessary in terms of study here.

So, I guess my inclination would be to, and I don't know if this is arbitrary or not, but to pick a specific distance from a turbine, and it's either, I mean, the two different numbers we've got in front of us here, at least in what's been proposed to us, is either "1.5 miles" or "2 miles". And, I guess my inclination would be just to pick one of those and see if we can make that work.

CHAIRMAN HONIGBERG: Well, from the SB 99 Report, we've also got "one mile" and "10 times the rotor diameter width". How big is a rotor diameter, roughly?

MR. WIESNER: And, that may differ. You know, these turbines keep getting bigger. And, one of the problems with picking a specific number of feet is that, as the turbines get larger, maybe you're going to see the

```
600-foot turbine with even larger rotors, and that could have an effect potentially that extends beyond, you know, the one mile limit.
```

CHAIRMAN HONIGBERG: So, a 600 or a 620-foot rotor would get you to the 6,200 feet in Mason County, Michigan.

MR. WIESNER: That's correct. I don't think the rotors are that big. But we can figure out what the math might be, I think, and maybe use that as a quideline.

I guess I will point out as well that, you know, the SB 99 Report has a more specific list of the types of buildings that will be considered. But, in one sense, it is more restrictive than using "occupied building". Because, if you don't fall within the definition of "residence, learning space, workplace, health care setting, or public gathering area", you wouldn't be covered. And, I'm not saying that's a problem, I'm just pointing it out.

VICE CHAIRMAN BURACK: And, maybe this gives us some insights into how we might define "occupied building" or "occupied space", to include all of those, indoor and outdoor, potentially, and maybe then some catch-all language as well.

1 Mr. Chairman, maybe the way to leave 2 this issue is to ask Staff if they could take a further 3 look at this, in terms of where -- what standards have 4 been adopted, in terms of distances elsewhere, and help us 5 understand a little better what the rationales are for 6 different instances. 7 CHAIRMAN HONIGBERG: Director Muzzey, then Commissioner Scott. 8 9 DIRECTOR MUZZEY: I second the thought 10 that Commissioner Burack just summarized. Particularly, 11 when it comes to the list of specific locations where this would happen, because it's easy to consider places that 12 13 aren't on this more specific list. And, I will come back 14 to the idea of tourism again, but a lot of them do relate 15 to our tourism industry. And, so -- and, at least the 16 ones I'm thinking of at the moment. So, I would 17 appreciate a more general definition of those occupied 18 places as well. And, it would help to have Staff take a 19 stab at that, so we could think further about it. 20 CHAIRMAN HONIGBERG: Commissioner Scott. 21 COMMISSIONER SCOTT: So, building on 22 your comment just now, I'm trying to envision a occupied 23

building that doesn't -- isn't in the Table 2.a, number 2, one of those, "residence", "learning space, "workplace"

```
1
       that's pretty broad, "health care setting", "public
 2
       gathering area". I'm struggling to figure what doesn't
 3
       fall into that. You know, what would that be missing, I
       guess? Because the implication is is this is not
 4
 5
       sufficient, so it should be more general to include
 6
       everything.
 7
                         DIRECTOR MUZZEY: I can tell you the two
 8
       places that had popped into my mind. One would be a
 9
       library. Although, you could call that potentially a
10
       "public gathering area". And, also, I was thinking of,
11
       you know, some of our historic villages and, say, a
12
       country store, where tourists would go. You know, we have
13
       a number of those that have been in operation for decades,
14
       if not centuries, here in New Hampshire. And, I didn't
15
       see how that would fit into one of those categories.
16
                         CHAIRMAN HONIGBERG: Commissioner Scott.
17
                         COMMISSIONER SCOTT: Wouldn't, even a
18
       general store, wouldn't that be considered a workplace for
19
       somebody?
20
                         CHAIRMAN HONIGBERG: And, if you're
21
       looking at the Watson comments, Watson did not include
22
       "workplace".
23
                         DIRECTOR MUZZEY: Yes, and nor did Wind
24
       Watch.
```

```
1
                         CHAIRMAN HONIGBERG: But Table --
                         COMMISSIONER SCOTT:
 2
                                              2.a.
 3
                         CHAIRMAN HONIGBERG: Table 2.a did.
 4
                         DIRECTOR MUZZEY: Okay. I'm sorry. I
 5
       wasn't looking at 2.a.
 6
                         CHAIRMAN HONIGBERG: I had a feeling
 7
       that was the case.
 8
                         DIRECTOR MUZZEY: Okay.
 9
                         CHAIRMAN HONIGBERG: Commissioner Scott.
10
                         COMMISSIONER SCOTT: Perhaps we could
11
       ask Attorney Wiesner, since he has nothing to do all day,
12
       just to help us tease out if -- I'm in favor of using the
13
       language in Table 2.a, sub 2, because I think it captures
14
       everything that I can see. But, you know, maybe you can
15
       help think on would there be exclusions that we don't need
16
       to make if we were to do that, so maybe that would help
17
       the discussion. As a homework assignment, I suppose.
18
                         MR. WIESNER: I think the sense of the
19
       list is "where people spend a significant amount of time".
20
       And, that's consistent with the view that shadow flicker
21
      presents a public health risk, not merely an annoyance
22
       when it occurs. And, therefore, we want to determine
23
       where people are spending time, which may be an outdoor
24
       public gathering space or it may be a place of business.
```

And, I guess "workplace", and, again, we can play with the terminology, but I think we can come up with language that covers what needs to be covered. Whether it's "occupied building, plus public gathering space" or some other formulation, I think we can spend some time trying to develop that language.

thought I have, and this is an area where I think this might be useful, is that, assuming the Legislature does extend the deadline to November, one thing that might make sense to do would be to convene some sort of technical session, for stakeholders to come together and perhaps come up with language in some of these places that goes beyond general agreements, like you see in the SB 99, to actual language that would do that. That's something that I know some people have floated as a possibility, which sounds appealing to me in the moment.

MR. WIESNER: We've had some interest expressed from various stakeholders in having that type of session. And, in other contexts, that's been very helpful in hammering out language and fleshing out issues.

CHAIRMAN HONIGBERG: Anybody disagree

with that?

(No verbal response)

CHAIRMAN HONIGBERG: Thought not. I think also lurking in this question is whether the moon needs to be included in this. A couple of comments talk about shadow flicker caused by the moon.

Commissioner Burack.

VICE CHAIRMAN BURACK: Well, again, just reading here in the SB 99 Report, this Footnote 2, on, again, pages are not numbered, but it's in Section 2 of "Key Findings on Shadow Flicker". The footnote reads "There was some discussion within the work group on whether moon light could create the same shadowing effect. No formal evidence was available to suggest moon flicker is a problem."

And, again, it may just be that this is something that we would, if we do have more time, and we can convene a — some kind of a technical group or work group on this, to further understand that issue of moon flicker, and also to perhaps further explore some of the — some of the thoughts raised by Mr. Ward, regarding whether or not reflective surfaces also contribute to this or whether there are other seasonality or intensity issues involved that would cause other factors beyond just the Sun to have to be considered.

So, my recommendation would be for the

```
1
       moment, we proceed on the assumption that we, you know,
 2
       we're trying to be in a position to be able to have
 3
       something ready in time for July 1, unless we have a
 4
       deadline extension. I'm going to suggest we just focus on
 5
       the issue with the Sun for the moment. If we have more
 6
       time, then we go and we look at these other issues in
 7
       greater depth.
 8
                         CHAIRMAN HONIGBERG: I agree with that.
 9
       Any other thoughts or comments?
10
                         (No verbal response)
11
                         CHAIRMAN HONIGBERG: All right. Let's
12
       talk about the siting criteria for shadow flicker.
       section of the rules is 301.14(f)(2). It's the same page
13
14
       that has the sound standards, it's the next standard down.
15
                         (Short pause for members to review
16
                         comments provided.)
17
                         CHAIRMAN HONIGBERG: It's Page 17 of the
18
       Rules Proposal. Commissioner Burack.
19
                         VICE CHAIRMAN BURACK: Again, I don't
20
       know for sure what the genesis is of this. It appears to
21
       be somewhat consistent in certain ways with what we see in
       Table 2.b, which is under the "Alternative Proposals for
22
23
       Areas Without Agreement". Again, this is in the SB 99
24
       Report section. Where there's a discussion of a "German
```

standard of 30-hour astronomical maximum per year with an actual number of 8 hours per year; limit of 30 minutes per day." But this is a much greater number of hours. This is 30 hours per year, rather than 8 hours, but it does include the "30 minutes per day" piece. But this also — this language also limits it solely to "occupied permanent residences of a non-participating landowner".

So, it feels as if we're in a situation where we're studying shadow flicker at -- excuse me -- a much larger number of types of facilities, not just residences, but learning spaces, workplaces, health care settings, public gathering areas.

But, in terms of the actual standard for determining whether there's an unreasonable adverse effect, we're basing it solely upon, or, if we were to adopt this language, be basing it solely upon impacts on occupied permanent residences. And, I'm just trying to understand, is that — is that an appropriate sort of test or standard? Is there a reason why that same standard would only apply — wouldn't apply to any of the other kinds of spaces that would be part of the study itself?

And, Attorney Wiesner, I don't know if

MR. WIESNER: Well, I mean, as we just

{SEC 2014-04} {04-15-15}

you can shed any light on that?

discussed, there was fairly general language in the proposed rules regarding how the study would be performed and what the scope of it would be, and then this limit is restricted to residential properties. It does make sense, if the scope of the study is going to be broadened, to cover other sorts of property uses, that that would carry over here. With the, you know, with the caveat that, as noted in the OEP Report, there was some disagreement about whether roadways should be subject to a limit, although there seemed to be a consensus that they could be included in the study itself.

CHAIRMAN HONIGBERG: My distinct is the same as Commissioner Burack's. That there's a reason why all these types of places might be affected that should be part of the criteria evaluated. And, maybe for some it is a much less significant effect, and so it would be weighted differently when you consider how to apply those criteria.

But what strikes me is that, if there is a consensus that it could be a problem in all kinds of different settings, that that should be reflected in the criteria, as well as the report. And, I would say that the Wind Watch proposal I think tries to capture that I think. The Wind Watch proposal seems to match the

language from the Report and also in the criteria.

Although, perhaps can someone explain how the "30-hour astronomical maximum per year" and a "limit of 30 minutes per day" and "an actual number of 8 hours per year" works? That's the -- it's cited, I mean, it's identified as the "German standard" in the SB 99 Report, and it's picked up in the Wind Watch comments.

Attorney Wiesner.

MR. WIESNER: The German limit does recognize that, this is my understanding, the German limit does recognize that difference between "astronomical maximum", which is sort of a "worst case" scenario, versus the "actual number of hours where shadow flicker occurs at a site". And, a study that looks at both of those would determine both the "worst case" and the projected actual. And, then, as is noted in a number of the comments, the actual limit that's applied in Germany and Denmark is quite a bit lower than the 30 hours. In this country, it's quite common, for whatever reason, to see the limit as expressed as "30 hours per year", without distinguishing whether that's "astronomical maximum" or "actual hours".

And, I think that's the precedent that we've had at the Committee in prior cases, that it's just

```
1
       been 30 hours, without distinguishing the circumstances of
 2
       those hours. And, so, the proposal here, and, in
 3
       particular, the Wind Watch proposal, is to recognize that
 4
       distinction and basically adopt the German limit here.
 5
       So, in effect, it's two limits. The perhaps more relevant
 6
       one is the "8 hours actual in a given year".
 7
                         CHAIRMAN HONIGBERG: Mr. Oldenburg.
                         MR. OLDENBURG: I agree. I think the
 8
 9
       language that's in there is a little bit too restrictive.
10
       I think more needs to be included. I guess my only
11
       concern --
12
                         (Court reporter interruption.)
13
                         MR. OLDENBURG: I guess my only concern
14
       with the wording that's in there from the Watch folks is,
15
       it lists a whole bunch of stuff, but it also has just
16
       "private property" is one of them. To me, that includes
       half of the other things. So, all houses and buildings,
17
18
       and, you know, it's either private property or town
19
       property. So, then, and we sort of talked about the
20
       roadway area. But I agree. I think it needs to be opened
21
       up a little bit more. I think of seasonal homes,
       campgrounds, things like that, where the flicker would
22
23
      have a big effect. So, --
```

CHAIRMAN HONIGBERG:

Yes.

I think an

```
attempt to sneak "private property" into a laundry list of
other things is probably a bit of an overreach. But
that's just me.
```

Other thoughts or comments?

Commissioner Burack.

understand this table that's in the 99 Report, under 2.4, "Other General Comments", says "shows the results of the shadow flicker modeling submitted with the four wind energy applications reviewed by the SEC." So, what we're seeing here in this Table 2.c then I gather is what the modeling for those projects identified as the potential for shadow flicker, the number of hours per year on which properties, at least in the case of Groton and Antrim, and residential properties nearby for Lempster, the number of hours affected. But it doesn't indicate whether or not there was any actual restrictions imposed by the SEC with respect to any of those projects.

So, Attorney Iacopino, I'm just curious to know, do you have -- do you recall whether or not there were any hour limits placed in any of those matters?

MR. IACOPINO: I believe there were.

And, I'm trying to find a specific section at least in the Groton order right now.

1	VICE CHAIRMAN BURACK: Again, what this
2	Table 2.c seems to indicate is that it's pretty variable,
3	in terms of the number of hours. And, again, it's a
4	little hard to know which properties and how close by are
5	being assessed. But, in the Groton Project, suggests "one
6	to three hours per year for properties near the turbines"
7	as the maximum hours of flicker per year. Antrim suggests
8	"10 to 22 hours per year for properties". Lempster says
9	"More than 30 hours per year for properties close to the
10	turbines [and] 10 to 20 hours per year for residential
11	properties nearby." And, GRP says "Turbines remote - no
12	shadow flicker", presumably because there just are no
13	there are no nearby residences or other properties that it
14	was felt would or could be affected by a shadow flicker.
15	CHAIRMAN HONIGBERG: Attorney Iacopino,
16	you're scrolling through something right now, is that
17	right?
18	MR. IACOPINO: Yes. In the Groton Wind
19	Project, the Committee found that the only I guess
20	there was only one shadow flicker study provided, it was
21	provided by the applicant.
22	VICE CHAIRMAN BURACK: I would agree
23	with that.
24	MR. IACOPINO: And, in that study, the

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

basic conclusion was that "One percent of the study area may be affected from one to three hours per year and none would be affected more than three hours per year." And, the Committee ultimately found "Neither the intervenors nor Counsel for the Public offered evidence disputing the Applicant's shadow flicker analysis." So, there was not a limit in that particular proceeding. But they did adopt the shadow flicker report. And, these shadow flicker reports, you have to understand, they start with a computer model of what the shadow flicker would be. then, they go to the various receptors, and they -- which are identified, it may be somebody's home, it may be a school, it may be a day care. And, they then calculate the amount of shadow flicker that would be perceived at that particular receptor over the course of a year, and at any given time what the maximum amount would be. So, that's where we get the "30 hours, no more than 30 minutes". That is generally the way the reports that come to the Committee are structured. You know, they may come with different calculations, but that's generally the way that they're structured.

So, that was Groton Wind. And, I'm going to check Lempster for you as well.

1 CHAIRMAN HONIGBERG: Well, we're going 2 to be taking one more break. We're going to go through 3 straight till 1:00, but we need to take one more break for 4 Mr. Patnaude. So, this might be a good time to break. We 5 can do a little research on what's in there. And, then 6 we'd go probably for a little over an hour, to the end of 7 the day. That make sense? 8 (No verbal response) 9 CHAIRMAN HONIGBERG: All right. So, 10 we're going to break. We're going to break for ten 11 minutes or so, and come back. Attorney Wiesner, you have something you need to say or -- all right. So, let's take 12 13 Thank you. a break. 14 (Whereupon a recess was taken at 11:38 15 a.m. and the meeting resumed at 11:55 16 a.m.) 17 CHAIRMAN HONIGBERG: Attorney Iacopino, 18 I think when we broke, we had asked you to continue your 19 perusing of prior orders. 20 MR. IACOPINO: Yes. And, I did check 21 the Antrim order. They did not reach this particular issue in the aesthetics portion of that decision. 22 In the 23 Lempster, there was a similar statement to what I referred

to in the Groton, is simply that "The study provided by

1 the Applicant indicated that there were 10 to 20 hours per 2 year of shadow flicker, and that that was not an 3 unreasonable adverse impact, and nobody challenged that 4 during the course of the proceeding." 5 So, to date, although we are -- have 6 been provided with numbers like this, we've never actually 7 put a limitation on the certificate. And, based upon the substantive decision made by the Committee that there was 8 9 not an unreasonable adverse impact. 10 CHAIRMAN HONIGBERG: Commissioner 11 Burack. 12 VICE CHAIRMAN BURACK: Thank you very 13 That's very helpful. Would I be correct in 14 understanding that, as currently written, the statute 15 would provide the Committee with the authority to issue 16 conditions on a certificate for a wind facility that could 17 require it to restrict the number of hours in which shadow 18 flicker would occur, you know, to curtail operations, whatever else was necessary, to be able to do that? Would 19 20 you think that would be a reasonable exercise of the 21 Committee's powers and authorities? 22 MR. IACOPINO: You mean in an individual 23 docket?

VICE CHAIRMAN BURACK: In an individual

1 docket, yes.

MR. IACOPINO: Yes. I believe under the way the statute is written right now, the Committee could, either under impacts to public health and safety or under aesthetic impact, could put limitations on, say, shadow flicker.

VICE CHAIRMAN BURACK: That's very helpful to understand as well. Thank you.

CHAIRMAN HONIGBERG: Commissioner Scott.

probably won't help the discussion. But on the -- maybe for Attorney Wiesner, if you could help me. The proposed language, which is, I think, Page 17, 301.14(f)(2), I'll read it out loud. And, basically, the last sentence is my issue here. "Thirty minutes per day within any occupied permanent residence or non-participating" -- "of a non-participating landowner." So, am I reading that correctly, that would apply only within the structure -- within the structure, not at the structure, not around the structure, but within the structure?

MR. WIESNER: I think that's a good read of that proposed language. So, you know, if you were out at the pool or on the patio, and shadow flicker were an issue, arguably, this limit would not be triggered.

1 CHAIRMAN HONIGBERG: I think in an 2 earlier discussion, I think there's a consensus that this 3 is too narrow. 4 COMMISSIONER SCOTT: Well, I bring that 5 up as part of that discussion, so -- to take sure we're 6 understanding we're widening this very significantly to go 7 outside. I'm not opposed to that. I think it's probably the right thing. 8 9 And, on the other extreme, and maybe to 10 the extent we go to a tech session, but when I look at the 11 Audubon Society's 23rd March comments on this, they wish 12 it to be included on any -- to include any public or 13 private conservation lands generally. So, even if there's 14 no structure. But they don't give any rationale. 15 wondering -- I guess I'm giving the bookends when we 16 discuss this, those -- I think those are the two extremes, 17 only within a residence or only -- anywhere on the 18 property, private or public. I'm not suggesting that I 19 agree with either one of those. 20 CHAIRMAN HONIGBERG: Any other thoughts 21 or comments on shadow flicker at this time? 22 (No verbal response) 23 CHAIRMAN HONIGBERG: I do think that 24 this is definitely an area where a technical session would

```
be beneficial.
 1
 2
                         Should we move onto setbacks?
 3
                         (Short pause for members to review
 4
                         comments provided.)
                         CHAIRMAN HONIGBERG: I'll note we'll
 5
 6
       talk about wind setbacks first. There's a separate
 7
       discussion about setbacks for electric transmission lines.
       We'll start with wind.
 8
 9
                         (Short pause for members to review
                         comments provided.)
10
11
                         CHAIRMAN HONIGBERG: Anyone have any
12
       thoughts or comments regarding setbacks for wind projects?
13
                         VICE CHAIRMAN BURACK: Mr. Chairman, I'm
14
       happy to kick off this discussion anyway. I've just been
       trying to go back through the discussion in the SB 99
15
16
       Report on this issue. And, there are -- there are certain
17
       general topics on which there was agreement relating to
18
       safety zones, in terms of these issues. In fact, there's
19
       a list of seven different areas of agreement. And, there
20
       is general agreement that there should be safety zone or
21
       setback distances. Where there was not agreement is what
22
       the size of that setback ought to be or even what the
23
       factors are that necessarily ought to be part of it.
24
       think this is probably another topic on which, if we do
```

have an opportunity to do a technical session, it could be helpful for us to do that.

It's apparent that there are a number of different factors involved when it comes to ice and blade throw, as well as perceptions of what the risks are of actual turbine collapse.

So, I think there are, you know, there are general concepts here that perhaps go beyond some of the language that's here in the setback standards itself. My impression is that the numbers that are in here right now, that is that distances between a wind turbine tower and a non-participating landowner's property line right now reads "shall be no less than 1.1 times the turbine tower height as measured from the center of the wind base, and that the setback distance between a wind turbine tower and the nearest public roads be no less than 1.5 times the turbine tower height." My sense is that those are — those numbers are at the absolute sort of low end of the scale, in terms of what might be considered to be an adequate protective setback.

And, we have other parties, such as New Hampshire Wind Watch, arguing for a distance of five times turbine height, and that it ought to be to the property line, rather than to the -- rather than to an actual

```
1
       structure. And, that it ought to be three times facility
       height to nearest roadway. So, we've -- you know, we have
 2
 3
       a range of opinion here, in terms of what that setback
 4
       distance or safety zone should be.
 5
                         What I was trying to also find here, and
 6
       could not readily lay my hands on, is a table showing how
 7
       the SEC has actually addressed this in proceedings it has
       decided in the past. This reads as it's "Appendix C.3" as
 8
 9
       the table, I'm just not finding it. I don't know if
10
       anybody else has found it?
11
                         DIRECTOR MUZZEY: What's the table
12
       reference?
13
                         VICE CHAIRMAN BURACK: It says "Table
14
       C.3" -- or "Appendix C.3", I'm sorry. Appendix C.3, and
15
      may be a Table C.3 in Appendix C.3.
16
                         Attorney Wiesner, are you able to
17
       identify where that is in this document?
18
                         MR. WIESNER: I am. But there are no
19
       page numbers, so --
20
                         VICE CHAIRMAN BURACK: Unfortunately.
21
                         MR. WIESNER: It's the page that has
22
       Footnote "15" at the bottom, if that helps.
23
                         CHAIRMAN HONIGBERG: It's actually not
24
       that far past where it is in the SB 99 Report. It's only
```

1 about 12 pages past. 2 VICE CHAIRMAN BURACK: Okay. 3 CHAIRMAN HONIGBERG: It says "Background 4 Information on Safety Setbacks (Ice/Debris/blade throw)". 5 VICE CHAIRMAN BURACK: Oh. Okay. 6 CHAIRMAN HONIGBERG: Commissioner 7 Burack. 8 VICE CHAIRMAN BURACK: So, we've all had 9 a chance to look at this table now. And, essentially, 10 what it shows is that, with respect to distance to the 11 property line, in the Lempster and the Groton matters, 12 that was set at 1.1 times the height. The distance to 13 occupied buildings was set at three times the height in 14 both of those matters, that is Lempster and Groton. 15 the distance to public roads set at 1.5 times the height, 16 again, in Lempster and Groton. And, in the Granite 17 Reliable Project, there were no such numbers set, but 18 there was a 1,300-foot safety zone around the turbines 19 designated from which the public's entrance is 20 discouraged. Again, that's in a remote location in 21 northern New Hampshire. 22 But, with respect to both the Lempster 23 and the Groton matters, those distances were actually

{SEC 2014-04} {04-15-15}

determined by town agreement. There's also a note here

indicating that, in the Groton matter, there was a

524-foot safety zone set for the employees of the operator

of that facility.

CHAIRMAN HONIGBERG: Director Muzzey.

DIRECTOR MUZZEY: The other point of discussion I see here, and it's similar to what we've seen in other discussions this morning, is the idea of measuring something to a building that may be occupied versus property line. So, I think that, in this case, that issue again will need to be solved. And, whether or not we consistently decide one way or the other for every issue, or if it varies by issue, I'm not sure how that will come down. But we certainly heard a lot of public comments in regard to from where this should be measured.

CHAIRMAN HONIGBERG: Commissioner Scott.

COMMISSIONER SCOTT: I agree. And, that's consistent with our earlier discussions. I will say, my feeling is, as a minimum, we ought to have a standard for the property line. And, perhaps, again, like as we've done in other certificates and incorporating the agreements with the town, we could also potentially have a different standard to the occupied residence. But I think the property line makes sense.

I do struggle with, to the extent the

```
1
       safety -- I understand the setback has a safety aspect to
       it, but establishing a setback for a non-participating
 2
 3
       property owner were probably advisable, I quess I struggle
 4
       with, if I'm a property owner and I want to waive my
 5
       rights, why are we telling them that "no, you still have
       to be X amount away"? Is that -- you know, that strikes
 6
 7
       me as strange also.
 8
                         But, having said that, if it's a safety
 9
       standard we're trying to establish, I get that, I guess.
10
       Am I reading it the same way? I'm reading the existing
11
       language and the proposed language, which would set a
       setback for non-participating landowners also. So, I'm
12
13
       looking on, again, Page 17. Is that correct, Attorney
14
       Wiesner?
15
                         MR. WIESNER: I mean, the setback
16
       standards are effectively set for non-participating
17
       landowners. Because, if you're a participating landowner,
18
       you've waived your rights to take advantage of those
19
       setback requirements.
20
                         COMMISSIONER SCOTT: Okay. So, I've
21
       read this wrong. I thought I read "participating" in here
22
       also. So, thank you.
23
                         VICE CHAIRMAN BURACK: So, looking at
```

this more -- language more closely, then it appears that

the distances adopted in this language here are similar to the distances adopted both in the Lempster and the Groton certificates. Is that right, Attorney Wiesner?

MR. WIESNER: Yes. These standards are consistent with the past precedent. And, as you noted, Mr. Vice Chair, in those other two cases, Lempster and Groton, there were actually town agreements that were brought to the Committee, and presumably approved by the Committee as setting reasonable standards of general applicability.

VICE CHAIRMAN BURACK: And, I think the argument that we're seeing in comments from numerous parties is a view that these setbacks should be set such that there is effectively no or zero risk of ice throw or shadow flicker onto any part of a non-participating landowner's property. That's the argument being made as to why these distances would not be adequately protective.

And, I don't know whether there is sort of what -- what level of risk is appropriate or acceptable under these kinds of circumstances. And, Attorney Weathersby, I don't want to put you on the spot, but I'm just curious whether, in the zoning world or the land planning world, there are any sort of general standards or guidelines that are looked to to determine what -- what is

a level of acceptable risk posed by one use on one property on an abutting property? Is there any kind of a -- of a set of guideposts we could look to in that arena or is there really no such thing?

MS. WEATHERSBY: I think, as far as the effects of a project on a property, it's comes down to like a reasonableness standard. But there are more technical setback type requirements for things like cell towers, where I think usually the standard is like one and a half times the height of the tower, so that, you know, for the fall zone. So, there's some transfer to this concept, but it doesn't take into account the throwing of ice, which would extend presumably further than the fall of the tower.

CHAIRMAN HONIGBERG: While I'd like to think a -- while I'd like to think a technical session might be beneficial here, I have a sneaking suspicion this is going to be an issue that people are going to be -- are going to dig in on. But maybe I'm wrong. I think that there's going to be a sentiment out there that, if there's any possibility of an ice throw onto any part of any piece of property, that's going to be unacceptable to some people. I don't know if that's reasonable. I don't get the sense that that's been the standard we've applied, and

I don't get the sense that that's the standard that's applied elsewhere. Because it would effectively prohibit the use of wind turbines at any time when there might be ice, which is a fair amount of time in this state. But I don't know. I'm not sure.

been reached in past dockets, past applications, which have been the subject of agreements, and then memorialized in orders, and are reflected in the proposal, that's not a bad — it's not a bad place to start. You know, maybe there's been some change in the technology, if they're bigger, they can throw further, then you need to revisit and maybe adjust those numbers. But that structure seems like an appropriate way to think about the ice throw issue. And, then, the collapsing issue, and that's the same as a cell tower or anything else, you've got to have some appropriate setback for the possibility that the thing will just collapse, which I assume happens, but not very often.

Anyone have any thoughts? Comments? Commissioner Burack, you look like you're ready to say something.

VICE CHAIRMAN BURACK: I'll just offer that I'm going to suggest that we, for the moment, run

with the language that we have. And, if there is -- if there is an opportunity to do a technical session on this, it may be helpful for us to bring parties together and see if we get any -- if there's any further consensus at all with respect to particularly to this ice throw issue, and what level of risk really applies here. And, it may be that there are -- there are other ways to address those risks through management approaches such that it's not so much a matter of setbacks.

But I'm going to offer that we run with the language that we have. And, again, see if there's time to have further discussion later.

CHAIRMAN HONIGBERG: And, I agree with that. I mean, the SB 99 Table 3.a, under "Areas of Agreement" on this, talks largely about operational issues, and prospective curtailment use, and making sure everyone's aware of the issues, and keeping a close eye on ice accretion. Those are operational aspects of one of these things, not the setback.

VICE CHAIRMAN BURACK: I would just ask the question, would just ask Attorney Wiesner to give — do you have some thought to whether the areas of agreement identified there under Table 3.a, whether any of those are areas that would not otherwise be within the realm of the

discretion of the Committee in setting conditions for a certificate? And, if not, then we should be looking at ways to incorporate those areas of agreement into our criteria for consideration in some fashion.

MR. WIESNER: I think this is primarily a list of potential mitigation strategies. And, I think that the focus of developing the initial proposed rules was to deal with the setback. And, then, if there were, you know, perhaps determined to be an unreasonable adverse effect from potential ice accretion, let's say, that that could also further be subject to mitigation strategies and conditions that would be imposed by the certificate, even if the setback requirement were satisfied.

So, in other words, the setback is not -- setting the setback is essentially a minimum. If there were good evidence that ice, accretion and ice throw might occur outside that setback, I think my view is that it would be reasonable for the Committee in that circumstance to consider additional mitigation measures that could be imposed as conditions in the certificate.

CHAIRMAN HONIGBERG: Director Muzzey.

DIRECTOR MUZZEY: I think that philosophy could apply to a number of these considerations we're looking at today. Is that something we need to put

1 into the rules, as almost boilerplate language, that that type of special consideration may apply? Otherwise, are 2 3 we -- is the Committee authorized to do so? 4 CHAIRMAN HONIGBERG: Commissioner 5 Burack. 6 VICE CHAIRMAN BURACK: I suppose one 7 thing we could do would be to, if we don't already do this in the rules, would be to ask the applicants to identify 8 9 proposed mitigation strategies to address any areas where 10 there may be deviations from the criteria that would 11 otherwise be expected to be met. There may be other ways 12 to phrase that, but that would be one way to approach 13 this. So, at least we have the -- we have an expectation 14 that the applicants can identify mitigation -- potential 15 mitigation strategies. And, then, that certainly I would 16 think it would be within the authority of the Committee to 17 be able to determine what those ultimately appropriate 18 mitigation strategies are to be included within the 19 certificate itself. I think that would be pretty 20 consistent with the way the Committee has operated 21 historically. Attorney Iacopino, would agree with that 22 23

or add anything to that or --

I think that's the MR. IACOPINO: No.

way the Committee has operated historically. I would just point out one thing, in number 5, in Table 3.a, is -requires "a safety zone or setback distance shall be defined for each turbine". And, that's not typically how the Committee has ruled on these issues in the past. They have given the setback that you saw in the table in Appendix 3.C -- or, C.3. But I just wanted to point that out to you.

But, yes. I think that individual consideration has been given each time the Committee has considered setbacks. And, you can tell that from just the table, because, with the Lempster and Groton projects, you have this concern with the neighboring properties, whereas in the Granite Reliable, they had just a general safety zone, which indicates that the Committee looked at them differently, and believed that they required a different approach to setbacks, because of the geography, the layout, the density of the population, and things like that.

So, it would be appropriate to have some ability for the Committee to use a different standard.

VICE CHAIRMAN BURACK: So, you're suggesting that we may want to consider, in addition to the language that's in here about setback standards, to

1 include some additional language that would account for 2 other situations where the geography, the topography, the 3 density of nearby development, etcetera, --4 MR. IACOPINO: Right. 5 VICE CHAIRMAN BURACK: -- may 6 necessitate or may make a different approach appropriate? 7 MR. IACOPINO: Yes. Or, a different value here. I mean, what we have in here is 1.1, 1.5, and 8 9 3. It may be that a particular project comes before the 10 Committee that you say "that's not enough", or "that's 11 more than enough and should be less", I think there should be some ability for you to use that flexibility, given the 12 13 nature of the project before you. 14 CHAIRMAN HONIGBERG: Mr. Hawk. 15 MR. HAWK: I think I'm pretty 16 comfortable with the physical catastrophic setback, 17 whether it's one or two, doesn't matter. But I think, 18 number one, the likelihood of that happening is very low. 19 Having the blade fly off the turbine tower is another 20 thing, and having the turbine tower physically break 21 apart, as we used to worry about with cell towers. It was 22 just one or two times the tower height. And, so, that's 23 easy.

The thing that is not easy for me is the

ice blade throw. I think that's -- I'm sure there's some engineer that could figure that out. But I think that's going to be a much, much larger distance. So, I'm wondering if we ought to focus on that, and not worry about the physical failure of the structure.

MR. IACOPINO: One thing that I neglected to mention, in terms of the thing that the Committee might want to consider. In addition, for an individual project, if you set a limit, and then allow some flexibility for yourself, is that many of these turbines now are equipped with what they call "cold weather packages", which are designed to mitigate the accumulation of ice on the -- on the blades. So, one of the substantive things that a Committee -- the Subcommittee or Committee could do in assessing a particular application is determine whether or not that type of technology affects your decision at all. It's just another factor to go along with things like population density, geography, and things like that.

VICE CHAIRMAN BURACK: Could you help us understand a little better what a "cold weather package" might consist of? What are the technologies that are -- is this heating units built into the blades? Is this that kind of thing?

MR. IACOPINO: Basically. I'm sure	
I'm sure this is very simplistic. But the way I look at	
it is, basically, it generates heat in the blades, so that	
the ice does not accumulate on the blades or on the rotor.	
And, I suspect that the engineers that sell these turbines	
will say it's much more implicated than that. But,	
generally, it is that's what I look at it as. And,	
generally, they are controlled both from a base unit at	
the individual plant, but also at a control center	
somewhere, these most of these manufacturers have a	
central control center, whether it be in Washington state	
or in Germany or in Spain, where they can actually tell	
you how much, you know, what the weight differential is on	
the blades, and whether or not there's an ice accretion	
problem. So, they can my understanding is that they	
can do that, at least the major manufacturers, both from	
the site and from the central control, central command and	
control. And, of course, I believe that there is one of	
these requirements is they have to have operational staff	
who can actually go out and look as well, which is in the	
agreed-upon table.	
CHAIRMAN HONIGBERG: Any other thoughts	
or comments on this section?	

VICE CHAIRMAN BURACK: Just that I think

```
1
       that the suggestions that we've heard from Attorney
 2
       Iacopino, based on our experiences here, we ought to ask
 3
       Attorney Wiesner to try to work into some revised language
 4
       here.
 5
                         MR. IACOPINO:
                                        Sorry.
 6
                         VICE CHAIRMAN BURACK: We're just piling
 7
       on.
                         CHAIRMAN HONIGBERG: Attorney Wiesner
 8
 9
       now wants to know what you just said.
10
                         DIRECTOR MUZZEY: What he said.
11
                         MR. WIESNER: And, actually, what I was
12
       going to raise as a potential issue is, you know, the
13
       setback may not be the perfect way to solve ice throw.
14
       And, it sounds like we heard about technological options
15
       that may limit the risk of ice throw. What we have not
16
       done so far in these rules, and I'm not necessarily
       proposing, I'm just throwing this out, is requiring some
17
18
       sort of a study to be done, as to, you know, in a given
19
       location, given the turbine height, and expected
20
       atmospheric/meteorological conditions, what is the risk of
21
       ice throw? What is the -- this is almost like a sound
22
       study, except it's ice throw. How far might the ice fall?
23
       How can that be mitigated?
```

24

CHAIRMAN HONIGBERG: I actually was

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

thinking the same thing. That this is becoming a different discussion. That the setback applies to the failure of the equipment and the falling down or the breaking apart of the equipment. But the ice throw is a separate issue. It has a distance component to it. But it's going to potentially be different in every single application and every turbine within every wind application.

There is, I would point MR. IACOPINO: out to you, in the Lempster Wind decision, there was substantial discussion during that case, and there's some discussion in the decision about a study by Mr. Matilsky, I believe, or Dr. Matilsky. And, actually, in the Lempster decision, the Committee that heard that particular case down -- I shouldn't say "downplayed", but didn't accept those studies, because they were purely theoretical. I shouldn't say "didn't except it". I think they accepted it for the theoretical purposes, but recognized that there were certain practical factors that weren't included in those studies. And, that's in the -where there was extensive litigation about ice throw in the Lempster -- Lempster decision. And, in that particular case, if you wanted to go through the transcripts, there are, in fact, I forget the gentleman's

name, but there was an MIT professor who was a intervenor in that case, and presented substantial evidence with respect to various studies about ice throw.

CHAIRMAN HONIGBERG: Director Muzzey, then Mr. Hawk, then Commissioner Scott.

DIRECTOR MUZZEY: In our Initial

Proposed Rules, on Page 11, Item (4), toward the top, we
do ask for "an assessment", within the application

materials, "of the risks of ice throw, blade shear, and
tower collapse on public safety, including a description

of the best practical measures taken or planned to avoid

or minimize these occurrences, if necessary." So,

probably some additional language in that Number (4)

would -- could be used for more of a report on that.

CHAIRMAN HONIGBERG: Mr. Hawk.

MR. HAWK: If there is mitigating technology that can be used on windmills, why wouldn't we just ask some of the suppliers what they have got, how it works. And, if we are satisfied, we can just dispense with this one. I mean, I can visualize the engineering analysis of, you know, the windmill going around so fast, and so much ice flies off and so forth. But, if there was mitigating measures that can be put on the windmill in the first place, maybe that ought to be our standard.

```
1
                         CHAIRMAN HONIGBERG: I'm guessing that,
 2
       if that existed, the industry would have suggested that to
 3
       us in their comments on this topic.
 4
                         MR. HAWK: Okay.
                         CHAIRMAN HONIGBERG: But it's possible.
 5
 6
       Commissioner Scott.
 7
                         COMMISSIONER SCOTT: I was basically
       going to make the same point, and I will, as Director
 8
 9
       Muzzey. I think, if you looked at 301.08(a)(4), on Page
10
       11, regarding the assessment, I think, if we expanded
11
       that, so it's clear just not an assessment of the risk of
       ice throw, meaning it's X percent chance that it will
12
13
       happen, if we expanded upon that to include an
14
       understanding of expectations for how far, etcetera, I
15
       think that would help that discussion. And, if had to
16
      modify the certificate accordingly, that would help tease
17
       that out, I think, and help inform the Committee.
18
                         CHAIRMAN HONIGBERG: Commissioner
19
       Burack, then Mr. Oldenburg.
20
                         VICE CHAIRMAN BURACK: Just listening to
21
       this discussion, it's apparent that, as with so many of
22
       these areas, this is an area in which both understanding,
23
       as well as technology, are evolving. And, I would hope we
```

could find a way to craft a rule and a set of standards

that recognizes that. That, you know, it sounds like the industry is being responsive overall to this concern that's out there about ice throw. And, I'd like to think we could find a way to write a standard that would recognize — that could set some specific setbacks now, or otherwise take steps based on current knowledge, current understanding, current technologies to be able to be protective, but also provide an opportunity for waivers or other approaches, if new technologies or approaches can demonstrate that the risks are otherwise being mitigated or controlled in some fashion.

CHAIRMAN HONIGBERG: Mr. Oldenburg.

MR. OLDENBURG: Well said. I'll say something less poetic. But, in C.3, there's statements in there that GE Wind states they have done studies. And, then, in the next section, it talks about "Component Failure", and Vestas Turbines has done a study about debris throw. I got to believe that the industry has this type of information. And, I don't know if we could — while we could put setback requirements on it, it's almost like we would have to have a waiver process or at least a mitigation process or some way for the applicant to come in and say "but, with this turbine, we can do this, either to mitigate or have studies that show ice throw isn't

1 going to be that far because of this technology or this 2 information." Because I have to believe, like anything, 3 it depends on the manufacturer, the information they have. 4 And, I have to believe that the different manufacturers 5 have done studies. Just in the little information that 6 I've seen, it seems like pinning down a number, a rigid 7 number, would be difficult. 8 CHAIRMAN HONIGBERG: I agree with that. 9 And, I'll note off the record -- off the record. 10 (Off the record.) 11 CHAIRMAN HONIGBERG: Is there any other 12 comments on this topic? 13 (No verbal response) 14 CHAIRMAN HONIGBERG: I mean, there's 15 clearly a little bit more work to be done here, but I do 16 think we have an approach in mind to separate these two 17 aspects of the distance, the distance from something, and 18 maybe come up with a slightly different structure for 19 that. 20 So, let's move on to setbacks for 21 electric transmission. All those people who are here 22 solely to hear about electric transmission, and were just 23 torturing themselves by listening to wind, and now perk up

and we'll talk about electric transmission. The language

```
in the proposed rules on Page 11, and it's letter (b),
 1
 2
       it's 301.08(b).
 3
                         (Short pause for members to review
                         comments provided.)
 4
 5
                         CHAIRMAN HONIGBERG: Commissioner Scott.
 6
                         COMMISSIONER SCOTT: I guess I'll start
 7
       with Attorney Wiesner again. He's the one we pick on the
       most here, I think. So, help me. So, that existing
 8
 9
       language doesn't specify any setback, per se, for electric
10
       facilities, correct? It just outlines an assessment of --
11
       well, basically, an assessment or analysis of electric and
       magnetic fields, and some sound assessment also, correct?
12
13
                         MR. WIESNER:
                                       That's correct.
14
       no setbacks specified for transmission lines. And, you
15
      know, several commenters have suggested that there should
16
           There's the EMF issue, but there's also a reference
       be.
17
       here, as you see, to "FERC and HUD standards". The FERC
18
       standards are primarily concerned with trees falling on
       transmission lines and is there a reliability concern?
19
20
       So, it's really specified in terms of the height of the --
21
       or, the expected potential height of vegetation outside of
22
       the right-of-way that might fall onto the lines within the
23
       right-of-way. And, the HUD standards, to the extent I
24
       understand them, is really concerned with the fall zone,
```

and the potential that transmission or distribution line set of towers/poles might fall onto buildings which have uninsured mortgages on them.

my mind is, is it reasonable — let me back up. Are all transmission lines the same, right? So, I've seen some transmission corridors with multiple lines, I've seen some with a lot less. If the desire is to look at magnetic and electric fields, and the sounds, which I assume is a buzzing from the activity on the lines, is there a reasonable expectation we would set a one-size-fits-all for something like that?

MR. WIESNER: Again, if there were to be a setback requirement, it might be stated in terms of some factor of the height of the towers. And, if there were multiple towers in the same right-of-way, it might be specified in terms of "the distance between the closest tower to the edge of the right-of-way", something along those lines. But my understanding is that the higher voltage transmission lines are going to generate greater electromagnetic fields.

One of the questions is, is there really a health impact to that? And, I think the OEP Report was inconclusive on that point. But, as you note here,

```
1
       there's a reference to what's called the "precautionary
 2
       principle", which is essentially we don't, even though it
 3
       may not have been demonstrated that there is a significant
 4
       health impact, we should proceed with precaution, because
 5
       perhaps there may be.
 6
                         CHAIRMAN HONIGBERG: Thoughts?
 7
       Ouestions? Comments? Mr. Hawk.
 8
                                    I think this suggests to me
                         MR. HAWK:
 9
       that there's a dual setback thinking we have to talk
10
       about, too, as we just did with wind farms. That there's
11
       the physical failure of the towers, you know, maybe
12
       there's a break in the cable and it goes off-site or
13
       something like that. So, there's a physical aspect.
14
       then, there's the EMF issue that I agree is still very
15
      much out there, in terms of whether it's real or not. But
16
       I think we ought to be protecting the public, if that
17
       proves in ten or twenty years to be the case. So, I would
18
       look at two different standards here, physical damage and
19
       EMF concerns.
20
                         DIRECTOR MUZZEY: Regarding --
21
                         CHAIRMAN HONIGBERG: Director Muzzey.
22
       Sorry.
23
                         DIRECTOR MUZZEY: Regarding the existing
24
       drafted language, I'm also curious as to the sound levels
```

```
1
       noted under Item (2). Sound that "might reasonably be
 2
       expected to increase sound by 10 dBA or more over ambient
 3
       levels". When we were discussing sound just a little
 4
       while ago, it was a "5 dBA or more over ambient levels".
 5
       And, my question is, is this type of sound different, and
 6
       so a different standard is appropriate? Or, should we
 7
       have the same standard of so many dBA or more over ambient
       levels for all energy facilities?
 8
 9
                         My suspicion is that we should be fairly
10
       consistent with our sound measurements. But I do wonder
11
       if there is something special about transmission sounds
       that it's different here. And, I just don't know the
12
13
       answer to that.
14
                         CHAIRMAN HONIGBERG: Attorney Wiesner.
15
                         MR. WIESNER: I was going to jump in and
16
       say, I think the greater difference here is where it's
17
      measured, not the standard.
18
                         DIRECTOR MUZZEY: So, it's different in
19
       several ways then.
                         MR. WIESNER: Well, it's measured at the
20
21
       edge of the right-of-way.
22
                         DIRECTOR MUZZEY: Okay.
23
                         MR. WIESNER: And, I think there's an
24
       assumption there that people are not going to have their
```

1 houses right at the edge of the right-of-way, although that's possible. And, it depends on the location. 2 3 But I think that's the basis for the differential. It's sort of similar to the Berlin BioPower 4 5 sound standards, which are measured at the edge of the facility boundary, and may seem high as a result. Of 6 7 course, that's in an urban location as well. 8 CHAIRMAN HONIGBERG: Commissioner Scott. 9 COMMISSIONER SCOTT: And, Director Muzzey, I agree the concept, I mean, noise is noise, and 10 11 there should be a limit. I will say, on its face, I think wind -- to answer your question, I do see a difference, if 12 13 you will, in the type of noise generation from a potential 14 for wind, in that you set up this pulsating, for want of a 15 better word, scenario, where I believe, and I'm less 16 familiar with what's envisioned for noise coming from 17 power lines. But I think you're thinking, at least my 18 view, is it's more consistent of a hum or, --DIRECTOR MUZZEY: Uh-huh. 19 20 COMMISSIONER SCOTT: -- you know, so 21 that's -- it's more consistent. So, I'm not suggesting that's better or worse. Though, I think some would 22

{SEC 2014-04} {04-15-15}

suggest the pulsating is actually worse. But, again, I'm

not suggesting any noise is good. So, I think there is a

23

1 difference, but -- if that helps.

2 DIRECTOR MUZZEY: Thank you. It does.

3 CHAIRMAN HONIGBERG: Other thoughts?

Comments? Commissioner Burack.

VICE CHAIRMAN BURACK: I'll just offer the observation that, at least as worded, this first item here "include an assessment of electric and magnetic fields and the potential impacts of such fields on public health and safety" is quite vague, and maybe that's what we want. And, I simply will raise the question as to whether or not we would want to be more specific about what we're asking for? And, I don't have a strong opinion on this one way or the other. I just know that there are — there are recommendations in here, again, these are alternative proposals for areas without agreement. This is Table 4.a, in which there are, particularly Items 5 and 6 anyway, that seem to speak to sort of what needs to be considered in doing such an assessment.

Again, I don't know how important this is. I am mindful of the fact that this is an area in which there is — does not appear to be any real scientific consensus as to what the true risks are. And, just trying to make sure that, whatever we do with this, to the extent that we're going to ask people to study it,

we understand what we expect to get, and others understand what they -- what they can expect to see or what they're going to have to produce.

CHAIRMAN HONIGBERG: Isn't this the classic issue that's going to get litigated in every transmission case? There's going to be people who come in with studies that say whatever they want the studies to say. And, there will have to be an assessment as to whether that's — whether, in that instance, if it's close enough, far enough, whether the risk is significant enough or not?

I don't see this being capable of a black or white/yes or no answer. So, I'm not sure how much more specific we're going to be able to get, in terms of -- I mean, I certainly don't think we're going to be able to turn this into a criteria.

VICE CHAIRMAN BURACK: I agree with that. And, it may be that we're best just to leave this language as it is, and give the applicant an opportunity to bring their assessment in. And, if there are others who wish to challenge that or wish to bring in data suggesting some different — some different analysis, certainly parties could do that as well.

CHAIRMAN HONIGBERG: Director Muzzey.

1 DIRECTOR MUZZEY: My only suggestion 2 might be to add language that said something "the 3 assessment should be based on current scientific 4 understanding of this issue", so that we encourage applicants to base their assessment on, and most, of 5 6 course, would do this, but on the most recent findings on 7 this, as opposed to something that may have come out years 8 ago. And, so, recognizing that technology and scientific 9 understanding may be evolving on this, that, you know, our 10 expectation is it's based on the current understanding. 11 CHAIRMAN HONIGBERG: Commissioner 12 Burack. 13 VICE CHAIRMAN BURACK: Well, I'm just 14 looking at this language here again, and comparing it with 15 (b)(2), which is the issue of the operational sounds, 16 where there's a reference to the "proposed facility" 17 itself. It's not clear, from the way (b)(1) is drafted, 18 whether that is to be sort of an academic exercise and 19 analysis of the basic theoretical potential for electric 20 and magnetic fields and potential impacts, or whether it's to be in the context of the actual proposed facility. 21 22 CHAIRMAN HONIGBERG: I think it might be 23 appropriate to include some context in that first item, so

that it's clear we're talking about this project. It will

obviously have the theoretical underpinnings. But, you know, if there's a distance aspect to the effect of electromagnetic fields, that would be captured, I think, if we provide some location-specific context in the first item. I agree with that.

There's a disagreement within the commenters about the fall zone issue. Is one needed? Do we need to consider that? Electric transmission lines exist in rights-of-way that tend to be somewhat large. There's usually a space around significant transmission lines. I don't know. National Grid didn't think so. HUD is concerned about its mortgages. Actually, we should all be concerned about HUD mortgages.

VICE CHAIRMAN BURACK: Could I just ask
Attorney Wiesner a question on that? Are we aware of any
other states or jurisdictions that have adopted fallback
zone standards based upon the HUD standard?

MR. WIESNER: For a large scale transmission siting, I'm not aware of it. That doesn't mean that it doesn't exist. I'm not aware of any. I think the thrust of the National Grid comments was more probabilistic. That, you know, this is so unlikely to occur, and there are certainly situations in more developed areas where you may have a 100-foot transmission

tower within a 50-foot right-of-way, just to throw out some numbers. And, you know, theoretically, there is a risk of fall. But the risk is so minimal, versus the other benefits of the development, that it should be permitted.

WICE CHAIRMAN BURACK: I do recall that we saw some photographs submitted in some of the -- some of the comments at some point, but they were -- my recollection, they were unlabeled, unmarked, and they seemed to show some falling towers. But it wasn't -- there was no description, no explanation of what they were, where they were, what the factors were that actually contributed. And, so, it does sound to me like, as you're saying, it's not a completely theoretical risk, but it's a relatively low risk.

CHAIRMAN HONIGBERG: Director Muzzey.

DIRECTOR MUZZEY: My concern with stating some sort of fall zone could be the unintended consequence of actually expanding the footprint of a facility. And, if it's not a risk that we need to worry about on a regular basis, do we really want to encourage a larger footprint of these facilities, particularly through developed areas?

CHAIRMAN HONIGBERG: Any other comments

```
1
       or thoughts?
 2
                         (No verbal response)
 3
                         CHAIRMAN HONIGBERG: Seeing none, we are
 4
       approaching one o'clock. I think the next couple of
 5
       issues in this packet, this table, are going to take a
 6
       little while. But there are -- there is at least one
 7
       issue we can pick up and deal with quickly. If you'll
 8
       flip a few pages back to item numbered "17", which is
       "Public Information Sessions". It relates to Rules 201.01
 9
10
       and 201.02. And, if you have the rules packet, it's not
11
       the same rules packet we've been looking at, it's the
12
       other one.
13
                         DIRECTOR MUZZEY: Oh, I know what you
14
       mean.
15
                         CHAIRMAN HONIGBERG: Off the record.
16
                         (Off the record.)
17
                         CHAIRMAN HONIGBERG: We're back on the
18
       record. So, these relate to "Public Information
19
       Sessions". And, I'll let people read.
20
                         (Short pause for members to review
21
                         comments provided.)
22
                         CHAIRMAN HONIGBERG: The pre-filing
23
       public information sessions are new, the result of the
24
      passage of SB 245 last year. The public information
```

sessions after applications are consistent with, I think, the old statute. So, there's another layer, another level of public information being provided by applicants under the new law.

I think the issues come down to the -- I think the statute requires sessions in each county, at least one session in each county. And, the rules are consistent with that, a session in each county in which the facility is located.

There are comments, commenters, or at least one commenter, who believes that there should be sessions in each town, or municipality, city or town.

There's a suggestion that the public information session should be video taped with "clear and discernible audio".

There's a suggestion that the applicant, how to put this, "the applicant answer every question asked", I think that's how — essentially how the request would go.

There's certain greater notice requested.

Those are, I think, the major issues that commenters have raised. Commissioner Burack.

VICE CHAIRMAN BURACK: Thank you. I think this is an area in which some of the things that are being asked for are beyond what the statute calls for.

And, I think, therefore, we probably would, although I

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

would certainly defer to counsel on this, I think we probably would not have the legal authority to require a greater number of public information sessions than the statute specifically calls for. So, for example, I don't -- I could be wrong about this, but I'm not sure we would have the legal authority to require public information sessions in each town that might be affected by a facility. So, I -- and, for very practical reasons, I'm not sure that's something that would make sense to do in any event, just because you could have some projects that affect, and particularly whether they're pipelines or transmission lines, could affect many, many towns. And, those towns may or may not even have facilities that could accommodate a group, although, they may. But, again, I think that's beyond probably our statutory authority. "Public notice to a service list", I would be comfortable with that, if there is, in fact, a service list in place at that time in the proceeding.

"Public notice to a service list", I would be comfortable with that, if there is, in fact, a service list in place at that time in the proceeding.

But, if we are effectively having pre -- basically, pre-application sessions, there may not be any kind of a service list. Certainly, the point that a service list exists because an application has been filed with the SEC, then notice to the service list as well as to communities of public meetings I think would make sense.

This issue of answering questions, again, I just want to make sure that we're not -- we wouldn't be exceeding our statutory authority here. But, provided we're not, I don't think it's unreasonable to ask that an applicant do their best to answer questions. But I'm going to imagine that there may be instances in which the applicants will not have answers to questions. The response may be "Thank you for that question. We haven't thought about that before. We've got to go back and consider that further", and that's one of the reasons why you want to have these kinds of particularly, essentially, pre-application public information sessions. So, it may be that language that talks about asking them to "respond to all questions" would be helpful here.

And, then, this last issue of a video tape being made, I guess I'm -- I'm assuming that the only way that that becomes of any value is, if there is also a requirement that that then be posted on the Web or otherwise made available for public viewing. So, unless we're also prepared to impose that expectational requirement or include it as part of the application materials, and then it gets posted somehow, YouTube or otherwise, to a website, I don't know -- I don't know what the value would be of doing that, unless we're prepared

```
1
       to, as I say, prepared to require to have it posted and
 2
       available.
 3
                         So, those are just some thoughts on each
 4
       of those issues.
 5
                         CHAIRMAN HONIGBERG: Anyone else have
 6
       thoughts or comments? Director Muzzey. You're next,
 7
       Attorney Iacopino.
 8
                         DIRECTOR MUZZEY: Would you like to go
       first?
 9
10
                         MR. IACOPINO: I was just going to
11
       answer Vice Chairman Burack's --
12
                         CHAIRMAN HONIGBERG: All right.
13
       Attorney Iacopino.
14
                         MR. IACOPINO:
                                        The statue at RSA
15
       162-H:10, I, does specify what is supposed to occur at the
16
       pre-application information meeting. It says that "the
17
       applicant" -- "At such session, the applicant shall
18
       present information regarding the project and receive
19
       comments from the public. Not less than ten days before
20
       such session, the applicant shall provide a copy of the
21
       public notice to the chairperson of the Committee.
22
       applicant shall arrange for a transcript of such session
23
       to be prepared and shall include the transcript in its
24
       application for a certificate."
```

1 So, there is some requirement of 2 documenting the session. And, there is some indication of 3 what should occur at the pre-application session. That is 4 in the statute as it exists. 5 MR. WIESNER: And, I'll just add, the 6 proposed rules language track the statute very carefully. 7 And, I think I share the Vice Chair's concerns that it may 8 be problematic to go far beyond that, either in terms of the number and locations of sections or how they're to be 9 10 conducted or how they're to be recorded. 11 CHAIRMAN HONIGBERG: Not having the statute in front of me, how duplicative of the statute are 12 13 these rules? Are rules like this even necessary? Or, is 14 the statute clear enough on its face to lay all this out? 15 MR. WIESNER: I think these are 16 substantially duplicative of the statutory language. And, 17 if there's a benefit to including it here, it may just be 18 one-stop shopping, in terms of knowing what your 19 requirements are. 20 CHAIRMAN HONIGBERG: Commissioner 21 Burack. 22 VICE CHAIRMAN BURACK: Thank you. And, 23 if I'm not mistaken, the drafting rules that we get 24 from -- through this process mandate that, if we're going

```
1
       to use the statutory language, we have to use it exactly.
       We can't -- my recollection is we can't really modify or
 2
 3
       deviate from it. I could be mistaken about that. But, I
 4
       mean, certainly, we can't, in our rules, we can't add to
 5
       or detract from or in any way modify statutory law. And,
 6
       I think practically all of these elements that we talked
 7
       about here could be doing that.
                         CHAIRMAN HONIGBERG: Anybody else have
 8
 9
       any other thoughts or comments? Yes, Attorney Weathersby.
10
                         MS. WEATHERSBY: I think we're all in
11
       favor of the public either attending or having access to
12
       what went on at the meetings. And, I don't think that
13
       there would be any impediment to a member of the public
14
       who is attending or the municipality that is hosting the
15
      meeting from Webcasting or filming it and posting it
16
       themselves. And, would hope that that would occur, if we
17
       can't mandate it, somehow could suggest that.
18
                         CHAIRMAN HONIGBERG: In this day and
19
       age, it would surprise me if a project of any notoriety
20
       weren't the subject of audio and video tapes at every
21
       public event.
                         Any other thoughts or comments?
22
23
      Mr. Hawk.
24
                                    Just the comment about having
                         MR. HAWK:
```

a hearing either in the county or some adjacent county, I
think that's something we -- somebody ought to make a
judgment call. If it's close enough, if a project is near
a boundary line, why not have another hearing?

CHAIRMAN HONIGBERG: I think the statute is the issue potentially. That there are certain requirements that the statute lays out. There may be circumstances when a board or commission or committee can exceed the requirements, or perhaps not. Attorney Iacopino.

MR. IACOPINO: Well, I don't know about with respect to county-by-county. But I do know that, if a project abuts another town, and it may have an impact on the other town, if it happens to be another county, under the Administrative Procedures Act, RSA 541-A, there is a requirement that notification be given to that affected municipality. So that it may not be the whole county that would get notification, but for — actually, for things that the Committee sends out, they would go to the abutting town as well.

Although, I'm not sure that this particular requirement, which is the requirement of the applicant, and not the Committee, would be covered under that, because the APA, the Administrative Procedures Act,

```
1
       applies to the actions of this Committee.
 2
                         But this does have a public information
 3
       and notice requirement, requiring that there be notice in
 4
       a paper of regular circulation in a county in which the
 5
       session to be held, not less than 14 days before the
 6
       session.
 7
                         CHAIRMAN HONIGBERG: Yes, Mr. Oldenburg.
 8
                         MR. OLDENBURG: I have a question. I
 9
       thought I read it once before, but I can't seem to find it
10
       right now. The informational meetings that take place,
11
       the proponent would offer their -- offer what the project
12
       is, but they're not obligated to answer questions
       currently, correct?
13
14
                                        The statute says they're
                         MR. IACOPINO:
15
       "to present information" and "receive comments".
16
                         MR. OLDENBURG: But they're under no
17
       obligation to answer questions.
18
                         MR. IACOPINO: It's does not
19
       specifically say "answer questions".
20
                         MR. OLDENBURG: That just strikes me
21
       as -- I spent 30 years getting beat up in public meetings
22
       about roadway projects. And, I find it funny that you can
23
       present a project and not answer questions about it.
24
       So, --
```

CHAIRMAN HONIGBERG: You figure you got beat up, you should allow everybody else to get beat up, too?

VICE CHAIRMAN BURACK: Could I just offer the observation that, and certainly one would like to believe that best practice on the part of the parties who are presenting these would be that they would understand that that kind of communication is essential to being able to move these kinds of projects into a realm of understanding.

MR. OLDENBURG: Right.

VICE CHAIRMAN BURACK: And, that probably everybody's best interests would be served by doing that, even if the statute doesn't explicitly require it.

MR. OLDENBURG: I would agree.

CHAIRMAN HONIGBERG: All right. We're going to need to wrap things up, because we have people who have to go to other meetings.

What we're going to do going forward, we still have a deadline that we need to meet. That may change sometime in the next few weeks, but it hasn't changed yet. So, we'll be sending out, probably using the magic of *Google.com*, some proposed dates and times for

```
1
       another meeting. If we get news from the Legislature that
 2
       the deadline is going to be extended, we may convert that
 3
       into something else. There may be value to continuing to
 4
       do it anyway, even if we do try to arrange for a technical
 5
       session for everyone who has interest to come and discuss
 6
       things, maybe find some common ground on some language on
 7
       some specific issues.
 8
                         Does anybody have anything else we need
       to deal with right now before we break?
 9
10
                         CHAIRMAN HONIGBERG: Seeing none, I'll
11
       entertain a motion to adjourn?
12
                         COMMISSIONER SCOTT: So moved.
13
                         VICE CHAIRMAN BURACK:
                                                So moved.
14
                         DIRECTOR MUZZEY: Second.
15
                         CHAIRMAN HONIGBERG: Moved and seconded
16
       a couple of times. All in favor say "aye"?
17
                         (Multiple members indicating "aye".)
18
                         CHAIRMAN HONIGBERG: Any opposed?
19
                         (No verbal response)
20
                         CHAIRMAN HONIGBERG: Thank you all very
21
       much.
22
                         (Whereupon the meeting was adjourned at
23
                         1:07 p.m.)
24
```