November 5, 2010-9:13 a.m. Public Utilities Commission 21 South Fruit Street MORNING SESSION ONLY Suite 10
Concord, New Hampshire

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

PRESENT:
Chairman Thomas B. Getz (Presiding)

Robert Scott, Director Brook Dupee, Bureau Chief Richard Boisvert
Stephen Perry, Chief Charles Hood, Administrator Donald Kent, Administrator Eric Steltzer

SITE EVALUATION SUBCOMMITTEE:
N.H. Public Utilities Comm.

Air Resources Division - DES Dept. of Health \& Human Serv. N.H. Div. of Historical Res. Inland Fisheries - N.H. F\&G Dept. of Transportation Dept. of Resources \& Econ. Dev. Office of Energy \& Planning

Counsel for the Committee: Michael Iacopino, Esq. Iryna Dore

COURT REPORTER: STEVEN E. PATNAUDE, LCR No. 52

ALSO PRESENT:

Counsel for the Applicant: (Groton Wind, LLC)

Counsel for the Public:

Reptg. the Buttolph Group:

Reptg. the Town of Groton:

Susan S. Geiger, Esq. Douglas L. Patch, Esq. (Orr \& Reno)

Peter Roth, Esq.
(Sr. Asst. Atty. General) Evan Mulholland, Esq. (Asst. Atty. General) Michelle Thibodeau

James Buttolph, Intervenor Cheryl Lewis, Intervenor Carl Spring, Intervenor

Miles Sinclair, Selectman
I N D EX

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PROCEEDING
CHAIRMAN GETZ: Okay. Good morning, everyone. We'll reopen the hearings in Site Evaluation Committee Docket 2010-01. And, I'll note for the record that eight members of the Subcommittee are present this morning. We have a quorum. And, Mr. Harrington will not be joining us today, but he will review the transcript when it's available.

So, let's take appearances.
MS. GEIGER: Yes. Good morning, Mr. Chairman, members of the Subcommittee. Susan Geiger, from the law firm of Orr \& Reno, and I, along with my colleague, Doug Patch, represent the Applicant, Groton Wind, LLC.

CHAIRMAN GETZ: Well, let's continue with appearances. Mr. Buttolph.

MR. BUTTOLPH: My name is Jim Buttolph.
I'm an intervenor from Rumney. Good morning.
CHAIRMAN GETZ: Good morning.
MR. SINCLAIR: Miles Sinclair, Selectman, Town of Groton.

CHAIRMAN GETZ: Good morning.
MS. LEWIS: Cheryl Lewis, intervenor
from Rumney.
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CHAIRMAN GETZ: Good morning.
MR. SPRING: Carl Spring, intervenor of Rumney.

CHAIRMAN GETZ: Good morning.
MR. ROTH: Peter Roth and Evan Mulholland and Michelle Thibodeau, Counsel for the Public.

CHAIRMAN GETZ: Good morning. Our intention, first of order of business today, is to hear the testimony and cross-examination of Mr. McCann. Is there anything we need to address before we move to that? (No verbal response)

CHAIRMAN GETZ: Okay. Mr. Buttolph, are we ready?

MR. BUTTOLPH: I believe so.
Mr. McCann, if you would be ready to be introduced.
MR. McCANN: Ready.
MR. BUTTOLPH: Okay. You'll be sworn in first.

MR. MCCANN: Before we start though, I'm picking up the audio from Jim pretty well, but not from the rest of the room. I'm not sure if the microphone connections are good. Would someone, whoever is going to be asking me questions, please speak into the microphone.

CHAIRMAN GETZ: Off the record.
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(Brief off-the-record discussion ensued.)

MR. PATNAUDE: I'll swear him in. CHAIRMAN GETZ: Please.
(Whereupon Michael S. McCann was duly sworn and cautioned by the Court Reporter.)

MICHAEL S. MCCANN, SWORN DIRECT EXAMINATION

BY MR. BUTTOLPH:
Q. I'll ask you to state your name please.
A. My name is Michael S. McCann, spelled M-c-C-a-n-n.
Q. Would you please state your place of employment.
A. My place of employment is at my own appraisal consulting firm, McCann Appraisal, LLC, which is located at 500 North Michigan Avenue, in Chicago.
Q. Are you the same Mike McCann who filed prefiled testimony on August 31st, 2010 of this docket, Groton Wind?
A. Yes, I am.
Q. Would you please articulate your background for the Committee here.
A. Certainly. As I mentioned, I'm a real estate appraiser and consultant. I've been exclusively engaged in that
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area of real estate for 30 years now. I'm primarily a commercial/industrial appraiser, but a good portion of my consulting practice has to do with land-use issues, including zoning evaluations, and other types of evaluations that often seek to determine whether or not there is any impact from one proposed land use upon other land uses in the area. Usually, residential land uses are considered to be the most sensitive to externalities or external forces. Some examples of this include working for both property owners and state agencies and other governmental agencies in condemnation matters, many other types of lawsuit situations, where there is damages at question, from any number of uses, ranging from contamination to pipelines to construction defects and the like.

Several years back I was appointed by the Federal Court-Northern District as a Condemnation Commissioner, for the purpose of sitting on a panel of Condemnation Commissioners to advise the Court as to the appropriate just compensation to be paid for high-pressure natural gas pipelines being routed through a number of private properties in Will County, Illinois.

When it comes to these types of
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evaluations, I've qualified and testified as an expert witness on property value matters, and in state courts, federal court, and various types of commissions, planning hearings, zoning boards, and so forth, in 20 states in the last count.

CHAIRMAN GETZ: One question --
WITNESS MCCANN: That's a pretty fair summary of my experience as it's relative and relevant to this matter.

MR. BUTTOLPH: Thank you. The Chairman has a question for you.

WITNESS MCCANN: Yes, sir.
CHAIRMAN GETZ: My understanding is that this information, I didn't see that in the prefiled direct testimony, this description of the background. But, I guess more important is did -- Ms. Geiger, did you have the opportunity, the Applicant, to pursue this background information through discovery?

WITNESS MCCANN: Well, yes. It was all summarized in my curriculum vitae, which was contained in several documents, including the Adams County, testimony I've given in Adams County, along -- it's contained in the appendix to that document. I believe it was provided, also attached to a review, my initial review of the Ben
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Hoen study. I'm not sure it was submitted as a separate document, but it's definitely attached to at least two different documents that have been submitted to the Applicant.

CHAIRMAN GETZ: And, I do see a professional biography midway through the testimony filed on August 31.

MS. GEIGER: Mr. Chairman, I don't have any objection to this line of questioning.

CHAIRMAN GETZ: Okay. Let's proceed. WITNESS MCCANN: Sorry.

CHAIRMAN GETZ: Mr. Buttolph.
MR. BUTTOLPH: I would like to make a motion to accept Mr. Michael McCann as an expert witness. CHAIRMAN GETZ: Is there any objection? MS. GEIGER: Yes, Mr. Chairman. I would object to that. I think that we did ask Mr. McCann whether he was licensed in the State of New Hampshire, and I think he answered in discovery that he is not. So, I would object to the motion.

MR. BUTTOLPH: Mr. Chairman, I believe that as a part of the motion that was filed by the Applicant, and in our response we indicated a very detailed response on Mr . McCann's part to that particular
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concern. And, as I had understood it, and as Mr. McCann has articulated in his discovery responses, he is fully licensed in the State of Illinois, and also has parallel federal requirements, which would be redundant were they to be applied for separately in New Hampshire. And, I believe that's a matter that was passed around as a response to that motion by our party.

CHAIRMAN GETZ: Mr. Roth.
MR. ROTH: Mr. Chairman, I guess I don't agree with Ms. Geiger's motion. I'm not, and, obviously, the rules of evidence don't apply here, and, even if they did, I'm not aware of any requirement that he be licensed in the jurisdiction in order to qualify as an expert.

CHAIRMAN GETZ: Yes. I think, again, as you point out, Mr. Roth, the rules of evidence don't apply. But I would say this. I think that the witness has demonstrated a general level of expertise to qualify him to testify here. But I think the Applicant does raise issues more related to the issue of weight of the testimony. And, I think there have been, in some of the papers that have been filed, indication that he has not been to New Hampshire, has not seen the site, and is not admitted into practice, as it were, in the state of New Hampshire.
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So, we'll recognize him generally as an expert in the matter of real estate appraisal, and it appears that he has some experience with wind turbine issues. But we're going to, in assessing his testimony, give the due weight, recognizing his general expertise, but that he has no particular expertise -- experience with this site or with New Hampshire law.

MR. BUTTOLPH: Okay.
CHAIRMAN GETZ: So, we'll permit him to proceed.

BY MR. BUTTOLPH:
Q. Mr. McCann, are there any changes to your testimony from August 31st? And, just to be clear, our understanding of what that testimony consisted of were three items, three things: A letter written to the SEC dated August 31st, 2010; a copy of a letter written to Mr. Ben Hoen dated December 14th, 2009; and also a copy of a report dated June $8 t h, 2010$, to the Adams County Board.
A. I would add nothing to my direct testimony, other than my complete responses to the Applicant and their questions, as well as Counsel for the Public, as that further illustrates the basis for my opinions and the testimony that was prefiled.
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Q. So, your prefiled testimony is not changing?
A. Yes.
Q. He's just referring to data requests?
A. Yes.

MR. BUTTOLPH: I guess at this point I would turn this over to cross-examination.

CHAIRMAN GETZ: Mr. Roth.
MR. ROTH: Attorney Mulholland will be conducting this cross-examination.

MR. MULHOLLAND: Mr. McCann, my name is Evan Mulholland. I'm an Assistant Attorney General, here working as Public Counsel with Peter Roth.

WITNESS MCCANN: I'm sorry to interrupt.
You're a little choppy. Could you -- I'm not sure if you're close enough to the microphone.

CROSS-EXAMINATION
BY MR. MULHOLLAND:
Q. Do you have Exhibit PC 10, your responses to your Public Counsel's questions?
A. I don't believe $I$ have it by that name. Was it a document I prepared? I have -- my exhibits are marked "Buttolph 1" through what have you. Which document are you asking about specifically?
Q. Mr. McCann, do you have this binder, that's rings, that
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Public Counsel submitted?
MR. BUTTOLPH: It has rings on it. I'm sorry, if I may interject?

MR. ROTH: Spiral rings.
MR. BUTTOLPH: It has a spiral, it's a spiral ring-bound booklet that $I$ believe was sent down to you, Michael.

WITNESS MCCANN: Okay. It's not in a three-ring binder. There were documents that presumably are contained in that binder. So, could you please just give a little assistance of identifying the document, other than by exhibit number.

MR. MULHOLLAND: Sure.
MR. ROTH: His October 1st letter.
BY MR. MULHOLLAND:
Q. It's your October 1st response to Public Counsel's data requests.
A. Yes, I have that in front of me.
Q. Okay. Can you go to Number 18?
A. Yes.
Q. In your answer, you refer to something missing, "failed marketing attempts"?
A. I'm sorry, I did not hear your question. "Something missing" what?
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Q. "Failed marketing attempts".
A. I'm sorry, I didn't -- there, my phone is turned off now. Please say it again, sir.
Q. Okay. You referred to "failed marketing attempts"?
A. I am only getting partial words. I'm terribly sorry, I'm just not hearing your full question.

CHAIRMAN GETZ: I think, Mr. Mulholland, I think you just need to get closer to the microphone and speak more loudly and see if that works.

BY MR. MULHOLLAND:
Q. You referred to "failed marketing attempts"?
A. Yes.
Q. What are those? What do you mean?
A. "Failed marketing attempts", that's, as I'm using it and referring to it in there, there are numerous examples of properties put on the market, at reasonable list prices, consistent with the rest of the market at the point in time they were put on the market, that sat on the market for extended periods of time and failed to sell. And, more specifically, refers to interviews I've made of realtors that have tried to sell these homes, in some cases up to 100 showings, that once the homeowner -- or, the prospective buyers saw the location surrounded by turbines or adjacent to
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turbines, in close proximity, they elected to not even make an offer. Those are the "failed marketing attempts" that I referred to.
Q. Are those "failed marketing attempts" considered in the Hoen report?
A. In the what report?
Q. The Hoen report.
A. The Hoen report? No, sir. They make a recommendation in the report that that is a worthy area of further inquiry, but do no such reporting of any research and indicate they have done no such research. But I would add that, prior to the publication of the Hoen report, I had personally communicated with Mr. Hoen and had indicated to him of these types of issues that are just simply not addressed in his report. They elected to go ahead and publish it without any further remark, other than "it's a good area for further study."
Q. In the Adams County report, I think that you --
A. Yes.
Q. -- referred to cutoffs of one mile and then two miles from the wind turbine, as sort of --
A. Yes.
Q. -- differences. Would you recommend the same here?

And, how come?
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A. Well, the distance from that study was home sales within two miles of the perimeter of any turbines, of the footprint of the turbine project, versus sales at least two miles or more removed, but otherwise in the same community. And, what it showed was a 25 percent lower prima facie price per square foot. I mean, without doing any other calculations, the sale price per square foot came at 25 percent lower within the two-mile zone. That is much flatter topography.

I have read and reviewed quite a bit of other information as to how sound carries. And, it's quite obvious, how, at greater elevation, the visual aspects carry further. There are indications of sound being audible as far as I read nine and a half miles away from a study in New Zealand, when turbines are located on mountain ridges and overlook other areas, apparently the sound travels better, or at least according to that study.

So, in that regard, I would say that two miles is really just a good -- in the case of Groton, it would be a minimum distance for the Groton [inaudible], sound studies should be done to determine -- an independent sound study should be done to determine if that sound, from that type of setting,
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could travel even further than two miles. There's many chances of sound from turbines being audible at distances of two miles. That's not uncommon at all.
Q. One of the difficulties I'm having in understanding your reports -- or, your recommendations' applicability here to Groton is that the -- the vegetation cover. There are a lot of houses nearby that may have a sound impact, but they won't be able to see the Project. And, then, there are some other houses where -- or, some locations where you will be able to see the Project, but you won't be able to hear it. What would you recommend that the Commission think about that issue?
A. Well, I guess the first thing I'd point out is that, even if one can't see the turbines, because of vegetation and trees and so forth, my personal experience in interviewing a family that had purchased a home in such a location adjacent to that same study area in Illinois, it was an acreage site with heavily wooded. And, they bought it for a 25 percent discount from the list price, but apparently thought that the trees would be adequate buffering and so forth, but found they could still hear the thumbing and so forth in their home, at a distance of $I$ believe it was about
a mile and a half from the nearest turbine. And, that was upwind from the turbine, not downwind. The wife expressed serious regret that they made that purchase, that their expectations just were not met, and the promises that were made were not met, and they just had to live with it.

And, certainly, sound is an issue for some people. The aesthetics from the viewshed being impacted are an issue for many others. And, for others, it's a combination of both factors. So, how can this be mitigated? The only -- there's only two answers I have for that. And, one is to place these so far from any occupied residential dwelling that there is no chance for impact or so minimal that it wouldn't be any more disturbing than, you know, the few times a year that a loud noise would occur in those type of locations. Or, alternatively, if the Project were to be approved as proposed, to condition that approval with the requirement for a property value guarantee, very similar in content to the Property Value Guarantee that I drafted that is contained in Appendix A of my Adams County testimony that has been submitted in the record.
Q. I want to ask you about that "Property Value
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Guarantee". How does it work? How does it work? And, specifically, how do you determine a house's value until it's sold?
A. Well, many Property Value Guarantees try to set a value at the current date. I recognize, however, that the market has been changing, it's been declining, pretty much everywhere. So, at the point in time that the guarantee that a property owner was either seeking to sell the house to the wind energy company or have the coverage instituted by virtue of putting it on the market, that's the point in time that the base value should be set. And, that could be set through a number of mechanisms, including the brokerage community, if they're using appropriate values, without, you know, really but for the wind project, or having an appraisal to set that value, or a combination of appraisals selected by the wind energy company and the property owner. And, then, if a typical marketing period or even an extended marketing period does not result in a successful sale, that the homeowner should have the option of selling to the wind energy company at the appraised value. And, I would add that, if what they're -- what Iberdrola is claiming the Hoen study says is true, meaning that there is no impact on value,
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then they really have no downside in such a condition, other than a little bit of administrative expense, and then time for, you know, perhaps one of their lawyers. But the downside to the property owners is that they could have a lifetime of equity just erased if they are unable to access that equity, because they can't sell their home because of the project.

So, from a real estate rights and valuation perspective, it's really appropriate to put the burden of the project, the financial burden, on the developer, and not on the community that has been selected by them to host it.
Q. But what about any advantage to the homeowners that may accrue because of the wind turbine project? Either because people want to live near them or because potentially the real estate tax burden would drop once you build a big project like this?
A. Well, I don't know that there is any such benefits. My research has disclosed nothing of that kind. So, that's very speculative. That what I have read and seen is that property values for taxation purposes can and sometimes are reduced. There's, in fact, a fairly large movement afoot in that regard. I've been contacted by at least a dozen different property owners
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that are seeking to do just that. What that does, however, assuming success for the -- for the closest neighbors that are actually having their value impacted, is it shifts the property tax burden then to other homeowners in the community that are not impacted by the turbines. So, it's really just another example of, you know, robbing from Peter to pay Paul. The benefit to the neighboring property owners for a Property Value Guarantee would really just be in the form of peace of mind, as far as their use and enjoyment of the property, they would at least know that, if they cannot stand living there because of sleep disturbances and other well-documented issues that rise above nuisance in some cases, to the point of home abandonment, that they will be protected, and that the authority that was in charge of protecting their health, safety, and welfare did a good job of making sure that they would be left whole, in the event that the project caused damages that the developer was not willing to mitigate voluntarily.
Q. Here's a question. If the Committee instituted a condition with the Property Value Guarantee for, say, houses within one mile of the turbine base, the nearest turbine, I guess, have you made an estimate of how much
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that may cost the developer?
A. Well, $I$ did include, in my Adams County testimony, an analysis that is applicable to Illinois. I have not run those same calculations for Groton. But I think what it basically amounts to, in a larger scale project of 100 turbines versus 24 in Groton, is about a two to three percent contingency item or line item, additional expense that I'm, you know, actually pretty sure could be saved somewhere else along the line, and really have no effect on the economic feasibility of developing the project. It really just would tap into the bottom line a little bit, to a de minimus level.
Q. I read your Property Value Guarantee draft, and it's pretty complex. Would it be --
A. I'm sorry?
Q. Complicated. It's detailed.
A. Yes, it is.
Q. My question is, would it be appropriate in your view just to have a 5 percent of value payout at the time of construction?
A. No, I don't think that begins to cover the level of damages to many of the properties that are likely to experience it. That sounds more like one of the good neighbor payments or that [inaudible], and also
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includes a gag order that, "if we give you this money, then you must not ever speak out against the turbine project in public." That maybe goes into a First Amendment area that I'm not an expert on. But, when you start stifling free speech, in the protection of real estate rights, $I$ don't, you know, from a real estate perspective, I don't think that's appropriate.
Q. Mr. McCann, that wasn't really my question. I was just asking you about the Property Value Guarantee, and whether it makes sense to just set an arbitrary number, as opposed to trying to figure out the assessed value versus the sale value?
A. Well, if you want to use a set number, I don't think 5 percent of the value is adequate. I believe it needs to be at least 25 percent as a set payment for anything within two miles, for any properties within two miles. That, you know, leaving the First Amendment issue aside, that would at least partially mitigate, might even over-mitigate some of the property losses. But, on average, that would be, at least in my professional opinion, a good strike point or a threshold percentage to apply for payments to property owners, such that it would make the issue go away.
Q. Mr. McCann, have you read any studies of diminution of
value near nuclear facilities?
A. I have not read any such studies that I can recall. I did have occasion to study property values adjacent to a nuclear facility in Illinois.
Q. And, what was the result of that study?
A. Well, that study involved some contamination of leaks from the Braidwood Nuclear Plant in the form of an estimated million gallons of tritiated or tritium-contaminated water that had saturated the groundwater and migrated to the nearest homes to the northeast that were surrounding a little lake. And, those homes were all on private well and septic, which, obviously, is not a good condition to have drinking water wells contaminated by radioactive water. And, the result of that study was that those properties were virtually unmarketable, and at best would sell for about 5 percent of their pre-existing market value.
Q. Mr. McCann, that's not strictly comparable, though. I mean, I was speaking of nuclear facilities without leaks, you know, just general industrial facilities?
A. I am not aware of -- I don't recall having read such a study.
Q. Mr. McCann, isn't it true that, for facilities like this wind turbine or other energy facilities, that the
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facilities provide tax payments or payments in lieu of taxes to the municipality or county where they're located?
A. I think that's typically true. It's also true that some developers then seek to have the state laws on taxation changed or otherwise minimize their exposure to taxation after the fact.
Q. And, isn't it also true that the Town receives some benefit from the workers and the whole development, in terms of secondary economic benefits?
A. I didn't hear your full question, there were some garbles in there, I'm sorry.
Q. Isn't it true that, in your experience, that when these facilities, energy facilities, wind facilities are built, that the locality receives secondary economic benefits, from payroll, from purchasing, from things like that?
A. Well, there's typically some temporary construction jobs and things of that nature. The benefits that can be anticipated are pretty well described in the Cape Vincent, New York Economic Development Committee Report, and also weighed against the potential risks, downsides, and costs. That's the most thorough analysis of the cost versus benefits scenario that I've
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read to date.
Q. Can you turn to your answer to Public Counsel Request Number 22. And, this is PC 10, Exhibit PC 10.
A. Okay. And, I have it marked as "Buttolph 1-C", but it's the October 1 response to Peter Roth. And, you're asking --
Q. Yes. Can you review the second to last sentence of your answer, about "lease-holders"?
A. And, I'm sorry, would you please repeat that?
Q. Can you just read the second to last sentence of your answer referring to "leases"?
A. "I also note that lease-holders typically must sign agreements to not speak negatively about wind turbines."
Q. Have you read any leases personally that have that condition?
A. I have read good neighbor agreements. I've read leases. I've also interviewed parties that were offered leases and reported those very conditions to me, yes.
Q. Any from this company, Iberdrola?
A. I just yesterday received a copy of an Iberdrola lease for their Deer Run Project, in Illinois. And, honestly, I have not read it yet, so $I$ don't know if it
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has that particular caveat in it.
Q. Okay. Mr. McCann, have you seen Public Counsel 12 and Public Counsel 13? They're colored pictures. Viewshed analysis.
A. The viewshed analysis? I'm not sure. Could you -- I don't know that I have it by -- I don't have a full set of exhibits, I have a --

WITNESS MCCANN: Jim, is that part of
the binder that $I$ was sent?
MR. BUTTOLPH: Mike, if you take a look at the screen. I'm sorry. If you take a look at the screen, that's what it looks like.

WITNESS MCCANN: That looks familiar, but I don't know that $I$ have it in this packet of documents. It might have been in a PDF that $I$ either downloaded or was e-mailed.

BY MR. MULHOLLAND:
Q. Well, what they are, and maybe I can just explain what they are, they are viewshed analyses of Loon Lake, which is the lake just north of the Project. And, what they show is that, from the surface of the lake, between 19 to 24 , the turbines will be visible on the ridge from the lake.
A. Okay.
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Q. What are the effect, in your expert opinion, of sort of a panoramic view of all the turbines, from, for instance, your house on Loon Lake, if you had one? How would that affect the value?
A. Well, the viewshed definitely is linked to the aesthetic quality of an area. And, even the Hoen study clearly finds something on the order of a 20 percent premium that can be attributed for premium viewsheds, premium views. That's contained in one of his tables or figures that rates the contribution to value of various qualities of view from a poor to a premium. And, the premium views often enhance value or typically, I guess, statistical analysis enhance values something on the order of 20 percent.

So, with any diminution or detraction or
destruction of the quality of that viewshed, any decrease in how the market rates, that I believe there would be a significant decrease.
Q. Do you have -- I'm sorry.
A. The distance isn't quite as important as the quality of the viewshed. And, I think that, if homes by the lake have their viewshed impacted, regardless of the distance, then -- or, the audible -- whether or not the turbines are audible there, it is still going to have
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some detraction on their property values.
MR. MULHOLLAND: Thank you, Mr. McCann. I think those are my questions.

CHAIRMAN GETZ: Okay. Thank you. Ms. Geiger.

MS. GEIGER: Yes. Thank You, Mr.
Chairman. And, I'm going to apologize to the Committee for having my back turned, but I think this is the best way for me to examine this witness. So, thank you. Good morning, Mr. McCann. Can you hear me?

WITNESS MCCANN: Yes.
BY MS. GEIGER:
Q. Now, could you please tell us what city and town you're talking to us from?
A. I'm sorry, I did not hear you with that little paper shuffling.
Q. Where are you located right now? Where are you speaking to us from?
A. From Florida, southwest Florida.
Q. Okay. And, is there anyone else there in the room with you?
A. No.
Q. Okay. Now, Mr. McCann, I believe you stated in your letter of August 31 st to the Site Evaluation Committee
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that you "have formed the professional opinion that the Groton Wind Project application does not comply with the applicable aesthetic standard for a Siting Certificate, from a real estate valuation and land use perspective." Is that your statement?
A. Yes.
Q. Okay. Could you please tell us what your understanding of the "applicable aesthetic standard" is in this docket?
A. Well, it's my understanding that it's pretty well described in the third full paragraph of the cover letter of my August 31 prefiled testimony. And, it references Title XII of the Public Safety and Welfare Chapter 162-H Energy Facility Evaluation, Siting, Construction and Operation. And, it requires that "a Certificate Issuance condition requires a finding that the facility "Will not have an unreasonable adverse effect on aesthetics", and it goes on "historic sites, air and water quality, the natural environment, and public health and safety"."
Q. Okay. So, it's your testimony that the aesthetic standard that you believe applies in this docket is set forth in your letter in the third paragraph?
A. That's the language of the code.
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Q. Okay. Thank you.
A. And, as I submitted, yes.
Q. Now, are you an expert in aesthetics?
A. As far as real estate aesthetics, yes. Yes, I am.
Q. Okay. Have you ever done a visual impact assessment?
A. Every property that I appraise involves some type of visual assessment that can be described as a "visual impact assessment", but not as your Application includes one.
Q. Okay. Have you reviewed the visual impact assessment that has been done by the Project's expert, John Hecklau, in this case?
A. I believe I did see that at some point.
Q. Okay. Does that, the visual impact assessment results, would you agree with me that that demonstrates the visibility of the turbines from various locations around the Project area?
A. I don't have an independent basis of saying that. I didn't do a formal review of that study. So, no, I can't say I will agree with you on that.
Q. Okay. Okay. Now, in arriving at your opinion about the Groton Wind Project's effects on local property values, did you take into account any information or data about the Lempster, New Hampshire Wind Project?
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A. I'm sorry, the what?
Q. Did you take into effect or into account any data about the Lempster, New Hampshire Wind Project in making your opinions in this docket about the potential effects of the Groton Wind Project on property values in the local community?
A. When was that project built? I don't believe I did have any data from Lempster.
Q. Okay. Now, is it also fair to say that your opinion about the Groton Wind Project's potential effects on local property valves is based solely on information concerning wind projects in states other than New Hampshire?
A. No. My opinions are based on data, case studies, personal accounts, and research, really, on a worldwide basis, but not specific, narrowly focused to a wind project in New Hampshire.
Q. Okay. So, in other words, I think I heard you say, if I understand correctly, and correct me if I'm wrong, that you looked at other information, but you did not examine New Hampshire-specific information, is that correct?
A. I did not examine what specific information? That was not clear.
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Q. You did not look at New Hampshire-specific information in arriving at your opinions in this case?
A. Well, I did not look at specific sale information. I did look at specific information about the location, the setting, the proximity to homes, the proximity to, you know, communities that might be impacted. So, it's a "yes" and "no" answer.
Q. Okay. But, in terms of your analysis of wind projects and their effects on property values, would you agree with me that you did not examine the effect of any New Hampshire wind projects on property values in the State of New Hampshire?
A. I would agree with you that I did not look at historic information from locally. I would disagree with you, because I did look at going forward the likely impact on the local communities.
Q. And, what communities were those?
A. Rumney, Plymouth, to some extent Groton, --
Q. Mr. McCann, have you ever --
A. -- the areas of the turbines.
Q. Have you ever been to Groton or Rumney or Plymouth, New Hampshire?
A. No.
Q. Okay. Now, have you ever -- have you ever appraised
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any property in New Hampshire?
A. I consulted with an appraisal firm in New Hampshire years ago, --
Q. And, when was that?
A. -- as I answered previously.
Q. When was that?
A. I believe that was around 1988, and it had to do with the appropriate way to value a quarry or mine. Given that I had developed a fair amount of expertise on that, I was sought out for that guidance by the local appraisers.
Q. Other than appraising a stone quarry in New Hampshire in 1988, have you ever appraised any other real estate in New Hampshire?
A. No, I have not.
Q. Okay. Are you an acoustical engineer?
A. No, I'm not.
Q. Do you have a medical degree?
A. I do not.
Q. Now, Mr. McCann, if you could turn to the last page of your August 31st letter to the Committee. Do you have that?
A. The last page, yes. But which page are you referring to? The last page of the document or the last page of
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the letter actually addressed to the Committee, which is Page 2?
Q. Right. It's the last page of -- it is the last page of the letter that's addressed to the Committee. It's dated August 31st.
A. I'm sorry, I did not hear you very clearly. Page 2 or the last sheet of the document?
Q. I believe it's Page 2.
A. Okay.
Q. And, there it says that "a 25 percent or greater value reduction can be reasonably expected for many of the approximate 200 homes and structures located in close proximity to the proposed turbines." Do you see that?
A. Yes, I do.
Q. Where exactly are these 200 homes located?
A. Well, where exactly, I can probably best show you on one of your own exhibits. The sound -- Epsilon sound map that's 1 believe titled "Figure 7-1". And, within one mile on that sheet, Figure 7-1, it shows the majority of the homes to the northwest, north, northeast, and east of the three basic clusters or rows of turbines. There are several homes that are located kind of in the valley along Groton Hollow Road and leading up to Rumney.
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Q. Do you know how far -- do you know how far away those homes are from the Project?
A. If I understand that legend correctly, that shows within one mile of any turbine.
Q. Do you know how many of those homes or structures would actually have views of the Project?
A. Not specifically, no.
Q. Okay. Do you have -- have you looked at the sound modeling results for those homes?
A. I believe I did read some data on that, yes.
Q. Could you please tell us whether you believe the topography in Adams County, Illinois is the same as in the Groton/Rumney/Plymouth, New Hampshire area?
A. Would you please say that again, it was a little tinny.
Q. Do you believe that the topography or could you explain what the topography is in Adams County, Illinois, as compared with your understanding of the topography or physical characteristics of the Groton, New Hampshire area?
A. Well, Adams County is a relatively level and flat terrain. But my opinions for Adams County were based on property sales, as far as the sale data support, from Lee County, Illinois, also being relatively flat. However, the location of the Mendota Hills Project,
where the data is derived from, is a more aesthetically pleasing sub-area within Lee County and west of Route 39, in Carroll County, in that it has more rolling hills and stands of woods that is more rural residential in nature than heavily agricultural with everything planted in corn. How this compares to the New Hampshire location for the Groton Project is that the turbines in Groton are proposed to be mounted on a ridge, which will elevate their height that much more than the surrounding parcels of land. And, certainly, from some vantage points, make them more visible from even greater distances.
Q. So, please help me understand what your position is. Is it your position that the impacts, the aesthetic impacts or the impacts of wind farms on a flat terrain in Illinois and the impacts the wind farms have on property values in those locations is going to be different than your opinion about the impacts of wind turbines on ridgelines and their effects on property values?
A. Well, it is my opinion that, by elevating the structures, increases the visibility from greater distances than on just flat land for some properties in some locations. The actual effect on property values
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is a case-by-case basis. And, I presented some good average figures. But $I$ would have suggest the more the aesthetic viewshed, which is how some just try to cast this as a view issue, but it's also, obviously, a noise issue. And, whatever the combination of the aesthetics and the sound impacts are is going to dictate more than anything else what the actual impacts are on a property-by-property basis. My opinions are more of a guideline or threshold that $I$ believe are very relevant and applicable pretty much anywhere in the United States.
Q. If I understand you correctly, you're saying that you need to look at a combination of the visual impacts and the sound impacts on a particular property before you can determine whether or not that property -property's value will be impacted, is that correct?
A. No, that's not correct. What I was trying to say, trying to make clear is that the reality of the view, the reality of the noise impacts for any given property is going to be what dictates the actual level of impact, whether that be 10 percent, 20 percent, 50 percent, or 90 percent. And, the greater the impact, the greater the impact on value.
Q. So, are you -- excuse me, Mr. McCann. Is it your
testimony that a Property Value Guarantee should be given out across the board to all properties within a particular radius of this Project, without knowing exactly what the impacts of the visuals and the sound -- sound projections from the Project will be?
A. Yes, because they're, you said it exactly right, projections, not the reality. The reality after the turbines are built is really what's going to dictate the market reaction, not your projections.
Q. Well, I used "projections" incorrectly, and let me say that a little bit differently. Is it your position that the Committee should impose a Property Value Guarantee condition notwithstanding the fact that you haven't determined, for each property within a two-mile radius, the impact that the Project is estimated or anticipated to have on those particular properties?
A. Well, it's anticipated to have a 25 percent impact on properties within a two-mile radius. So, --
Q. And, that's your opinion, correct?
A. Yes, that is my position, that the Committee should impose a Property Value Guarantee for at least two miles, and then use their own independent judgment or independent studies to determine if that impact area is likely to be increased beyond two miles, in light of
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how high these turbines would be located on a ridge -on ridges, excuse me.
Q. Mr. McCann, are there other factors than proximity to a wind turbine that can affect the sales price of a home?
A. I didn't hear the first part of your question.
Q. Are there any factors, other than proximity to a wind turbine, that can affect the sales price of a home?
A. I would say -- suggest probably the quality of the turbine. Certainly, some of the earlier models were much smaller. And, the --
Q. Excuse me, Mr. McCann. Excuse me. I apologize for the interruption, but I don't think you're understanding my question. I asked you "if there are any factors, other than the proximity to a wind turbine, that can affect the sales price of a home?"
A. Oh, certainly. Many factors can affect the sales price of a home. The quality, condition of the home, the other, the local economy, the state of the market, whether or not it has a premium view, in a nice, secluded site to begin with and that gets impacted after the fact. There's a whole host of things that can be factored into an appraisal that sets a baseline value on a property-specific basis for any properties within that two-mile or greater radius.
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Q. And, Mr. McCann, I think that one of the first things you mentioned in your response to my question was the quality of a home could have an effect on its sales price, correct?
A. Yes.
Q. Did you examine the quality of the homes that you have listed in your Mendota Hills report that's been submitted to the Committee?
A. I examined every one of them from multiple list sheets, from physical inspection, and from any records from the County that depicted the age and so forth. What I can tell you is that they were all pretty typical, of a range of ages, mostly older farm homes, some in the more newer construction, the 1960s, ranches on slabs, for example.
Q. But did you factor -- I guess the question $I$ have is, did you factor in, for each of those homes, their quality in connection with the sales price that you have listed on your one-page summary?
A. Yes. To the extent that I compared each of the homes within the two-mile zone to the homes outside the two-mile zone, I found them to be very consistent and compatible or even functionable, as far as the quality of those homes.
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Q. Did you include that information in your study?
A. I included a summary of the sales. I'm answering your questions the best $I$ can, counsel.
Q. But is it true that the Mendota Hills Property Value Study that you referred to in Appendix $C$ of your letter to the Adams County Board in Illinois is merely just a one-page listing of sales and property information, in terms of grantor/grantee, date of sale, etcetera?
A. That particular component in my study is summarized on one page, yes.
Q. Okay. Now, do you know the distance of each of those 53 properties listed on that one-page summary from the wind turbines that you were looking at?
A. I know that the first grouping is located less than two miles from the nearest turbine. And, the second grouping is located two miles or more from the nearest turbines.
Q. And, how much more? Do you know how much beyond two miles that second grouping is? Mr. McCann, can you hear me? Hello?
A. Is there an airplane going overhead?
Q. Not here.
A. Then, I don't know.
Q. Okay. The question $I$ have is, do you know how much
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further out than two miles from a wind turbine the properties in the second grouping, now by "second grouping", I think we're talking about homes numbered 17 through 53, is that correct?
A. Yes. Actually, on my chart, it's listed as "16 through 53". But I believe that might be a typo on the bottom, where I listed "1 through 16", and then "17 through 53".
Q. And, I'm asking you, well, whether it's 16 or 17 , let's say that the majority of the homes in your one-page summary that you have indicated are two miles or more away from the wind farm, correct?
A. Yes.
Q. How much further away than two miles are each of those homes?
A. From memory, if you would like me to try to answer from memory, I will, I believe the furthest home was on the order of six miles.
Q. Okay. Now, is it correct that you only looked at the sales prices of 53 homes for purposes of your study and conclusions in the Adams County report?
A. No, there's many other things I cited in the Adams County report, and many things I didn't cite. I'm really drawing on something in excess of 1,500 hours of
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experience in studying, evaluating, researching the impacts on the use and enjoyment, the impacts on occupancy, the common and often repeated experiences of neighbors to wind turbines, as well as sales, such as this Appendix C, that bear out how the market reacts to those things.
Q. And, I guess the question that I have really is that you're making a recommendation or it's your opinion that homes within two miles of a wind turbine will decrease in value by 25 percent. And, I'm asking you is the factual data on which you are relying in making that -- that opinion consists of your examination of the sales prices of just 53 properties in Illinois?
A. No. I've also based it on my review of the Hoen study that included something on the order of 7,500 sales, including approximately 120 that were located within a mile. On example after example of single case studies of single homes that sat on the market and sold, if they sold, at some great discount, for example, 40 percent. I've also based my opinion on information that the Hoen study had access to, but elected to not mention, including homes in Pennsylvania near a turbine project that were purchased by the developer at the appraised market value, and then resold at discounts of
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40 percent to 80 percent from that appraised value in order to accomplish a reasonably quick sale. There's lots of what industry tends to call "anecdotal information", but the appraisal profession tends to call "case studies" that I also draw on. This Appendix C, summary of sales at Mendota Hills, in Lee County, Illinois, just provides a more homogenous, because it's all from one location, a more homogenous indication, that is very consistent with, in many cases even lower than, value impacts that occur on a case study basis. The Internet is chock full of examples like that, if anyone cares to do the research of which I have done.
Q. And, finally, Mr. McCann, again, the data that you've examined does not include any New Hampshire-specific data, does it?
A. Could you say that again please.
Q. The data that you've just referred to does not include New Hampshire-specific sales prices, does it?
A. It still is a little bit mixed up. I'm terribly sorry. I'm not trying to be evasive, $I$ just want to make sure I hear your question.
Q. The data that you've examined in arriving at your conclusions does not consist of New Hampshire sales prices, does it?
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A. Well, I did review the background values and sale prices through several different real estate websites actively reporting asking prices and sales prices in that area. So, while these sale prices do not yet reflect any impact from turbines, $I$ did consider sale information from New Hampshire.
Q. Mr. McCann, you didn't --
A. The basis for the opinion, however, is drawn from existing turbine locations.
Q. But, Mr. McCann, you didn't provide any of that information in writing to the Applicant or other parties in this docket. Or, let me speak for the Applicant. You didn't provide that information to the Applicant, did you, in writing?
A. All the information that -- that my Adams County report pretty fairly summarizes the level of research I've done, the type of information I've looked at. And, I was available to answer any questions they had of me, including any other sales, down to the last one that $I$ ever reviewed; they didn't ask that question. I'm trying to be responsive to your questions now.

MS. GEIGER: I have no further
questions. Thank you for your testimony, Mr. McCann. WITNESS MCCANN: Thank you.
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CHAIRMAN GETZ: Okay. Questions from the Subcommittee?

MR. SINCLAIR: Mr. Chairman, may I ask him a couple brief questions please?

CHAIRMAN GETZ: Certainly.
MR. SINCLAIR: Mr. McCann, can you hear me?

WITNESS MCCANN: Yes, I can.
MR. SINCLAIR: My name is Miles
Sinclair. I'm on the Board of Selectmen for the Town of Groton, which is where the Project is supposed to be located.

BY MR. SINCLAIR:
Q. I was just curious, sir. Have you had an occasion to become involved in assessing potential property value impacts with any other energy producers, i.e. nuclear plants, coal-fired power plants, biomass plants?
A. I have had occasion to study property values adjacent to combined cycle natural gas-fired plants, as well as peaker plants. But not nuclear, other than what $I$ previously testified to, the nuclear plant, but never a biomass or solar or other energy projects.
Q. And, have you made any similar recommendations about a Property Value Guarantee with respect to those types of
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producers?
A. I have made recommendations of Property Value Guarantees to various clients, where it was not clear that the location of the proposed use was appropriate, meaning an industrial location -- okay. I'm getting a message there's a problem with the internet connection, but maybe that's cured now.

CHAIRMAN GETZ: Mr. McCann -- Mr.
McCann, I think we lost part of your previous answer. So, if you could restate your answer to Mr. Sinclair. BY THE WITNESS:
A. Yes. I have had many occasions to make recommendations to my own client, when they're developing land uses or proposing to develop land uses, that create the potential for conflict with neighboring residential uses. And, when the particular project locations are seeking to be introduced into a non-industrial area, in other words, appropriate location for a power plant, from a land use and real estate perspective, is an industrial location. Whether that be a combined cycle plant, a peaker plant, or a wind energy plant. And, for that matter, I have made recommendations to quarry clients and landfill clients that they do just that. And, I would also suggest, Mr. Selectman, that one
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client in particular, even though he had to litigate in court to get the court ordered approval for a limestone quarry, followed my recommendation on offering and instituting a Property Value Guarantee Program for the neighbors within a mile, even though the court did not order it.
Q. And, in terms of percentages of the Property Value Guarantee, with these other types of producers or circumstances that you've been involved in, where you've given a 25 percent figure here, what were your recommendations in those other areas?
A. Well, there's no one-size-fits-all answer. For example, a landfill client that I had done a study for and extract property values that were nearest the landfill, that, from as close as half a mile from the site to -- out to, if I remember correctly, two miles from the site that was studied, which was an active landfill, didn't show any change in the property values on an average per square foot basis or on the rate of change of value. I mean, they all appreciated, in both study groups, near and far from the landfill, at very similar rates of appreciation. But, notwithstanding that data support for saying there's no impact, there was still the opportunity for there to be some impact
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on the neighboring residential property valves. And, I didn't put a limit on it, like limit it out to 25 percent. I suggested that they offer that to every property owner within a one mile radius of their site. I've made recommendations of this kind to other zoning boards and so forth in Illinois, a few of which have actually adopted it, despite the strong objection from the wind developers.
Q. And, one last question, Mr. McCann. Do you consider yourself a proponent of wind energy or an opponent?
A. I consider myself neutral. I think, you know, conceptually, wind energy is a good idea. I like the idea of wind being used to generate electricity. I have read enough of it that $I$ understand there is considerable levels of issues and problems with it. But what I'm a proponent for is my objective studies, and I ratify them and stand behind them in my professional opinions.

So, I am officially neutral, although I will declare, and not just admit, that most of the people that are interested in my opinions on this matter, as it relates to wind turbines, are concerned neighbors, and, in some cases, town boards, municipalities, and counties that are actually trying
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to find out what's really likely to happen.
MR. SINCLAIR: Thank you, Mr. McCann.
WITNESS MCCANN: Thank you.
CHAIRMAN GETZ: Questions from the
Subcommittee? Dr. Kent.
DR. KENT: I guess we should do a sound
check first. Can you hear me?
WITNESS MCCANN: I can hear you, yes.
DR. KENT: Thank you.
BY DR. KENT:
Q. Are you trained as a statistician?
A. Can you speak a little slower please?
Q. Are you trained as a statistician?
A. I am not. Other than I've done some limited training through Appraisal Institute --
(Court reporter interruption.)
BY THE WITNESS:
A. Certainly. I'm not a formally trained statistician. I have received a limited level -- I would describe it as a limited level of statistical training through Appraisal Institute, appraisal courses that make use of statistical analysis.

BY DR. KENT :
Q. Have you used hedonic pricing models in your analyses
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of real estate values?
A. I'm sorry, I hate to ask you to repeat it.
Q. Have you used hedonic pricing models in your analyses of real estate values and impacts?
A. I have not initiated hedonic regression analyses.

Hedonic, I believe, just means "on its face". And, in that regard, my Appendix $C$ is a hedonic analysis, it's just not -- doesn't take the statistical analysis beyond the average price per square foot and the percentage difference in that average price.
Q. Could you tell me again how you isolated the effect of other factors in your -- what was that, the Mendota study? How did you isolate the impact of turbines on house prices?
A. By distance.
Q. What about those other factors, like house color, house size, acreage, number of rooms? How do you isolate turbines from all the other factors that go into house purchases?
A. Well, first of all, $I$ excluded acreage sales, even if they had a house on it, because clearly the land value for a 160-acre tract, for example, could, obviously, distort the value on a price per square foot for the house. Beyond that, by physically inspecting them and
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[WITNESS: McCann]
finding them all to be consistent and compatible with the market area, and seeing very similar levels of upkeep, maintenance, curb appeal, as the market looks at it, the home buying market, that is the first and foremost issue is curb appeal. And, that's what gets them in the door and has the most impact initially on the decision to buy or not to buy. What I did not do is attempt to isolate the difference between a shower stall and a claw leg bathtub contribution to price, because that starts making a series of assumptions that frankly allows an analyst to paint a target around a bullet hole.
Q. Were houses within two miles selling for the same price as houses beyond two miles, before the wind project was announced?
A. The sale prices as I've tracked them were pretty compatible throughout Lee County, at least eastern Lee County; western Lee County was not as desirable. Eastern Lee County was also extracting buyers from the more urban and suburban market areas around Chicago, and Lee County is due west of Chicago. So, the values in eastern Lee County, as I had tracked for a prior wind farm application in Oklahoma [sic?] County had shown to be pretty consistent and compatible throughout
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eastern Lee County, prior to the establishment of the Mendota Hills Wind Farm.
Q. That answer was a little complicated for somebody who's not living out there. Could you give me a "yes" or "no". Did you look at the -- before the wind park was announced, did you look at the prices of houses within two miles and the prices beyond two miles and find them to be the same?
A. Yes. As part of a different study, I did exactly that. Q. Can you provide that information to the Committee?
A. From memory, because I don't have those documents, this dates back to a study I did in 2005, where I was tracking all the property sale transactions for several years in eastern Lee County. And, what I found was that, leading up to the date of the Mendota Hills Project being established, that the property sales tracked pretty homogeneously. There were certainly some differences. Newer, larger homes were selling for higher prices, and the older, smaller homes were selling at lower prices. But, all in all, the prices were what you would expect in that market area at that time.

CHAIRMAN GETZ: Mr. Buttolph, I guess
what we'd like to see as an exhibit is that document. So,
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if you could get that, Mr. McCann, if you have that document, we'd like it provided as an additional intervenor exhibit in this case. And, the next number -do you have the next number? It would be "Buttolph 36".
(Buttolph Exhibit 36 reserved)
WITNESS MCCANN: I was not hearing what everybody was saying, a little cross-talk. But I think what I'm understanding, I'm being asked by someone to go ahead and provide a document that reflects that prior study for eastern Lee County?

CHAIRMAN GETZ: That's correct.
WITNESS MCCANN: And, who's requesting this, if I may ask?

CHAIRMAN GETZ: The Committee.
WITNESS MCCANN: Okay.
BY DR. KENT:
Q. Mr. McCann, do you know people who like the view of wind turbines?
A. Do I know people from where?
Q. Do you know -- have you met people who like the view of wind turbines?
A. I have heard people describe that they're, you know, beautiful or fascinating or interesting. But I've also noted that, for the most part, if it isn't a
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stakeholder in a project, it tends to be somebody that has just driven by one or stopped and looked it for a few minutes. But I have never once heard a person who lives amongst them make that claim or make that statement.
Q. So, you've never met a buyer -- let me put it this way. Every experience with a prospective real estate customer has deemed wind turbines a negative factor?
A. I'm not quite sure I heard your whole question. But, if I understand it correctly, you're asking me if every single buyer of a parcel of real estate that is adjacent to wind turbines has a negative impression, and I would have to say "no". The impressions vary. Some find it extremely negative and walk away, a large number of them do. Obviously, for someone to buy a home adjacent to an existing turbine project, they must find it less objectionable than other people that under no circumstances would live by such facilities.
Q. If living within view of a wind turbine is a personal preference, doesn't that not make it like any other factor in purchasing? The color of a house?
A. No. No, it doesn't. Most of the factors about buying a house have to do with the community as it exists, the school district, the quality of the neighborhood, the
quality of the house. These are things that can be pretty clearly ascertained, and certainly with fair disclosure from the seller, and a little bit of research by the buyer, in every case that I'm aware of. A wind turbine project being introduced after that fact, after that incredible large investment for most people, largest investment most people make in their life, even Mr . Hoen and others that are pro wind in their writings acknowledge that. That is introducing a use that is completely incompatible with residential, whether you talk about the quality of the structure, the height of the structure, the noise that's emanated from it, the blinking lights that the FAA requires, just the whole character of the project is heavy industrial, in regard to residential. That's -- I know this isn't a zoning case, but that's exactly the intent and purpose of zoning is to separate incompatible uses. These projects located next to homes fail to meet that.
Q. We're talking about "incompatible uses", are we talking about your opinion or the opinion of every potential real estate client?
A. Well, I guess I'll start with my opinion. It's definitely my opinion that they're incompatible uses. But the market is speaking loudly and clearly on this
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issue as well, both in anticipation of, and in hindsight, when they go to sell their homes, or, in some cases buy them, at steep discounts from what the values had been or would have been. So, --
Q. What we're saying -- really, what you're saying is --
A. -- it's a clear measure of incompatibility is the loss of value.
Q. What I'm hearing is, in your experience, it is a negative factor and is an incompatible use?
A. It is not only my experience, it is the experience of thousands of people that have reported it. And, the most recent example I can think of is, in Ontario, where a relatively small project, of only I think two turbines, has resulted in a reported 12 homes being abandoned. This is not my opinion, this is the market speaking, saying "we can't deal with the sound impacts", the wind developer won't mitigate, the Province of Ontario is leaving them flapping in the breeze. There's people walking away from their lifelong investments as a result of being overshadowed by turbines. I interpret that to mean that there's a loss of use and enjoyment. There's a definite impact on value. And, one woman property owner that has a lakefront home, completed it a few years ago, at a cost
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of half a million dollars, hasn't even been able to get a single person to come look at her home because of the turbines. This is what her realtor tells her, this is what she reports to me.
Q. If I could refer you back to your package to the Committee and your letter, top of Page 2.
A. Yes.
Q. Do you have that? Did I lose him? Can you hear me, Mr. McCann?
A. I can now. My screen was choppy for a minute.
Q. I'm looking at Page 2 of your letter to the Committee.
A. Okay.
Q. It says "the LBNL study clearly demonstrates that impaired or less desirable views reflect measurably lower sale prices than homes with average or premium views." Can you point me to where that LBNL study says that?
A. Well, let's go to the Hoen updated Webinar exhibit. And, bear with me a second, I'll give you the Buttolph exhibit number. Buttolph 1-4 [1-A?].
Q. I have the study.
A. Okay. And, $I$ will direct you to the correct page in a moment when $I$ find it. All right. On Page 20 of that, that exhibit, there's a chart that shows base hedonic
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model results in the quality of the scenic vista effect on sale prices. And, as you can see in the chart, the average --
Q. Hold on a minute. Hold on. I'm looking at, unfortunately, I'm looking at page numbers in the document, not as you might be looking at it. So, -A. It's Page 20 of 33 , as I see it on the PDF. And, -CHAIRMAN GETZ: Mr. McCann? WITNESS MCCANN: Yes. CHAIRMAN GETZ: Mr. McCann, I think we may have a confusion about documents. I think you are looking at the Webinar, which I guess actually is "Buttolph 1-A", not "1-4".

WITNESS MCCANN: Oh, okay. Right.
CHAIRMAN GETZ: But I think what --
Dr. Kent would like to inquire about the study itself.
WITNESS MCCANN: Okay. This is the same page -- exhibit out of the same page. If you prefer, I'll go to the -- I have to open up the original Hoen study. Bear with me a second.

DR. KENT: I see -- hold on. I'm looking at the figure and I'll find it in my document. WITNESS MCCANN: So, you don't need me to open up the original Hoen study?
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DR. KENT: No. No. If you're referring
to the figure, then we can work across here.
BY DR. KENT :
Q. Okay. Explain to me how that figure backs up your statement that the study "clearly demonstrates impaired or less desirable views."
A. Yes. And, on Page 20 of that Webinar document, which is Hoen's update in May of this year, from his December 2009 study, it is the same chart as contained in the original study. And, what you can clearly see is that, based on his statistical analysis, the premium views, over at the right side of that chart, can reflect a 13 percent premium above the reference category, and by the time a turbine project, and this isn't how he would phrase it, this is how I'm phrasing it, a poor vista created by a turbine project, or even a below average vista, can show 8 percent to 21 percent lower than the baseline average vista. I'm sure the vistas in Groton, Rumney, and Plymouth vary from property to property. But a mountain view or a view of mountains is one of the examples of the Hoen study that is classified as a "premium vista", or, in some cases, an "above average vista", if they're at a distance, or a greater distance.
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Q. Okay. Can I stop you there? Because you're answering a different question for me now. This chart shows "Poor Vista", "Below Average Vista", and so forth, up to "Premium Vistas". Do the authors of this study equate poor vistas with views of turbines?
A. No. They used other industrial structures and power lines and things that were not that natural.
Q. Okay. Thank you. Thank you. Thank you. And, do, in fact, the study's authors conclude that turbines are decreasing the value of houses?
A. Would you please say it again.
Q. Do the authors of this study, in fact, conclude that turbines are decreasing the value of properties?
A. They made a conclusion that it is not uniformly impacting values -- that it's not uniformly, consistently, and statistically significantly impacting values. Their own data, however, shows, even after excluding some clearly impacted sales, a 5 percent loss within a mile. They're virtually silent in closer proximity.
Q. Could you show me where they -- excuse me, I need you to stick with me. Can you show me where there's a 5 percent decrease in sales in this document?
A. Yes. On Page 22. And, it's actually $" 5.3$ percent" by
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their statistical calculations "within 3,000 feet" and "5.5 percent" of value loss within "between 3,000 feet and a mile". So, both those being over 5 percent and within a mile is what their statistics show. However, by using a very large background database, it can't help but have the finding of "lack of statistical significance". But --
Q. Why is that?
A. But it's clearly showing a 5 percent loss in average value from a nuisance stigma, as opposed to under their viewshed analysis.
Q. So, your opinion is that, even though the statistics said there's no significant difference, there is, in fact, a significant difference?
A. Please say that again.
Q. Your opinion is that, even though the model showed no statistical difference, you maintain there is a statistical difference?
A. I think 5 percent is a measurable value loss. So, from that standpoint, yes. How they constructed their model, there has been much criticism of that. And, it does not apply any accepted standards for this type of regression analysis. There's also a document submitted that had -- titled "Wind Farms and Rubber Rulers",
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authored by Al Wilson, who is not only an appraiser, but a regression analyst expert. And, I do rely on his conclusions. As far as the regression analysis conducted by Ben Hoen and the gentleman at Lawrence Livermore, did not apply any accepted regression standard model for this type of analysis. They kind of free-wheeled it.
Q. And, you base that opinion on a document by Wilson?
A. I base that opinion on Mr. Al Wilson's expertise, not only as a statistician and expert on regression analysis, but also as an expert real estate appraiser, who clearly understands real estate far better than Mr. Hoen, Mr. Wiser, or any of the authors of the LBNL study.
Q. Have you submitted Mr . Wilson's document to this Committee?
A. I did.

MS. LEWIS: That's Buttolph 1-F exhibit.
BY DR. KENT:
Q. One last question from me. Have you ever recommended against a Property Value Guarantee?
A. I have never recommended against one, no. DR. KENT: All right. Thank you.

CONTINUED BY THE WITNESS:
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A. I have not been asked to evaluate one from that perspective. No, it hasn't come up.

CHAIRMAN GETZ: Mr. Scott.
DIR. SCOTT: Can you hear me,
Mr. McCann?
WITNESS MCCANN: Yes.
BY DIR. SCOTT:
Q. Would you -- was it your position that any industrial activity within sight or sound of a property could impact its -- negatively impact its value?
A. Well, every use has some impact upon neighboring uses. That use -- that impact can be significant, insignificant, extreme, or so small that it's immeasurable or not measurable at all. Against that background, industrial uses do tend to be separated from other residential uses. And, when they're not, there often is some minor impact. And, I say "minor impact" in regard to typical industrial developments, because most industrial uses are completely enclosed and contained within buildings that protect neighboring properties from the sight, sounds and smells and so forth going on in the industrial operation. Very few industrial uses rise to the level of glaring -- being glaringly obvious as wind turbines. They're pretty
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singularly unique in every -- compared to any other industrial developments that I can think of that I've evaluated in 30 years, by virtue of their heighth, their activity, they're always moving, the noise that emanates from them. And, --
Q. Thank you.
A. And, the fact that they're completely in the open, quite visible.
Q. You testified earlier that you had never been to the area in question?
A. I'm sorry, I didn't understand anything you said.
Q. You had testified earlier that you had never been to the area in question, correct?
A. To Groton? I have not been to Groton physically.
Q. Are you aware that the area in question, where the wind farm of the Applicant, has been and -- historically had been and is currently in active logging, are you aware of those activities?
A. Aware of it being active in what regard?
Q. Logging.
A. Rocking?
Q. Logging, tree-cutting.
A. Logging? Logging. Okay, I'm sorry. I do recall reading about logging roads and that their was some
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historic logging activity, yes.
Q. And, the Committee yesterday received testimony to the effect that logging was going on, that actually people can hear the sounds and it woke them up. We have some maps showing clear-cuts in testimony. Did you take that into account when you looked at the before-and-after values of housing in your analysis in this area?
A. Well, I'm aware that there was historic logging in the area. So, yes, I did take it into account. And, having viewed logging operations and being aware of them generally in the past, whether that be out in Colorado, Idaho or Oklahoma, where I have seen active logging operations. I would point out that they can be quite disturbing on a more or less temporary basis, compared to wind turbines being disturbing for 30 years, 20 years, or however long the projects are active.
Q. But --
A. Quite a big difference in the longevity of the impacts.
Q. But do you think the logging itself would have a negative impact on property value and did you take that into account?
A. I think it could. And, it might be a valid background
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type of data to find, you know, homes, if a Property Value Guarantee is instituted, used, if there's any homes in question that are subject to influence from an active logging operation by the comparables used to set the value of those homes should also have a similar setting and potential issues.

DIR. SCOTT: Thank you.
CHAIRMAN GETZ: Mr. Steltzer.
MR. STELTZER: Hi, Mr. McCann. Can you
hear me?
WITNESS MCCANN: Yes, I can.
BY MR. STELTZER:
Q. Could you describe your familiarity to non-market valuation techniques?
A. My familiarity to non-market valuation techniques?
Q. Correct. Such as hedonic modeling.
A. Well, $I$ can tell you that, through the class and book taught by and offered -- authored by the Appraisal Institute or published by the Appraisal Institute on appraising the detrimental conditions, there's several techniques that are offered up as possible techniques to use. The preferred and most empirically sound method is Pyrrhic [sic?] sales, much like comparison of before and after or close and far sales in my Appendix
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C, followed by case studies, individual examples of "here's a house", or whatever the instant question is, and "here's the issue of contamination" or other adverse influence. And, case studies are cited in that course work and the text that goes with it as a reliable method. Absent any of that data, as the course goes, hedonic regression modeling can be, and I emphasize "can be", a technique that can result in a credible opinion. But it is fraught with all kinds of objective influence from the -- while it purports to be the most scientific method, it, in the setup of the regression analysis, is most susceptible to input and assumptions on the part of the analyst.
Q. Thank you.
A. In reading -- okay.
Q. Thank you. Would you agree that there are other non-market valuation techniques that could be used to assess both a positive or a negative impact?
A. Surveys, I believe, can be telling. But, mostly what the appraisal profession relies on is either inferred or fundamental market studies. And, an "inferred market study" is, simply put, "looking backward, here's what happened in a very similar situation." Every appraisal of every house that a bank orders has an
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inferred market study, in the form of three or four or so comparable sales, "here's what homes in the community sold for." That's an "inferred market study".

A "fundamental market study" attaches more to the issues of what drives the demand. Meaning, "Is there an increase in employment? Is a new factory coming to the area or office complex or shopping mall that's going to create employment, that's going to create demand for housing, and drive up the value of existing stock?" These types of fundamental market studies are -- can be good predictors, but are not necessarily the evidence that is typically accepted in court, which is almost always the inferred or comparable sales evidence, that, at least in my experience in many dozens of trials, that the courts have found the comparable sales evidence to be the most indicative of value and least subject to any free-wheeling or subjective input on the part of the appraiser or, in some cases, other type of value experts or witnesses.
Q. Would you believe that there is widespread disagreement amongst academia about contingent valuation, which is one of the survey methodologies you mentioned there for
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non-market valuation hedonic modeling and non-market valuation in general on the accuracy that you can get from that?
A. There is a lot of disagreement. Most of the people that do their own regression analyses seem to be confident of them. And, notwithstanding, you know, large fees to prepare such analyses, that might explain part of why they have such confidence in them. There are many others that, with no axe to grind or money to be made or lost, just truly objective analysts, that find some of these regression studies to be, what's the polite words, just unsupported or not following, for example, the accepted Standards by Mass Appraisal organizations, such as appraisers belong to the IAAO, the International Association of Assessment Officials, who have adopted standards for mass appraisal, meaning appraising many properties in a community or county or state, and the type of regression model that should be used because of its accuracy. That really ties very much in with the Hoen study, which did not use such an accepted model for the regression analysis. They developed their own.
Q. Thank you. My next line of questioning will be in regards to Buttolph Exhibit 33. This is the Property
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Value Guarantee Agreement that you had provided.
A. Yes.
Q. Do you have that in front of you?
A. I will in a second. Yes, I have it in front of me.
Q. Is it your recommendation that this Committee should consider utilizing this Property Value Guarantee Agreement as a condition on the Project that's before us?
A. If the Committee decides to approve the Project, given the level of evidence of inadequate setbacks -MS. GEIGER: Excuse me, Mr. Chairman. I'm going to object to this answer. I don't think there's been anything in the record that has indicated that there's an inadequate setback here. So, I'm going to ask that that comment be stricken from the record. CHAIRMAN GETZ: Mr. Steltzer, can you start your question again with respect to Exhibit 33? I want to make sure $I$ have this in context. MR. STELTZER: What I'm trying to do is to understand, if a Property Value Guarantee were to be considered by the Committee, some of the provisions that are in this agreement I have concerns with, and I'm trying to understand what those impacts may be.

CHAIRMAN GETZ: Then, please restate
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your question then for Mr. McCann.
BY MR. STELTZER:
Q. Maybe I'll jump just specifically to the questions then. Is it true that between 2003 and, say, 2005 several properties were -- that were being offered on the market were being -- having an asking listing price that was above the appraised value?
A. I heard most of your question, "between 2003 and 2005, is it true that some of the properties" what in relation to the list price?
Q. Were above the -- were above the appraised value.
A. Well, the appraised value versus the listing price I think can be two different things. But, yes, during that period of time, oh, I don't know the exact percentage, but it was not infrequent that properties would sell at or above list price, that's true.
Q. Would it be accurate to say that, and recognizing you may be unfamiliar with New Hampshire real estate values, that it is possible that a homeowner may choose to have an asking price that is greater than 5 percent above the appraised value?
A. Well, that's possible. And, depending on the quality of the appraisal, I'm going to assume that it is a carefully analyzed and well-constructed appraisal.
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And, under that assumption, $I$ would not recommend significantly more than that, because they could price themselves out of the market is essentially what can happen there. But, if your question is, "should a property owner be restricted from asking above appraised value?" And, I think the answer is "no", except maybe in the context of a Property Value Guarantee that would start the time frame from which the developer would have to buy the house and unfairly treat the developer. Because let's say, for example, somebody has the house appraised at 120,000, and somebody says "yes, but I want 250,000 . So, that's what I'm going to put it on the market at." And, then, after six months, there hasn't been anybody that showed up to buy it, or even make an offer, because it's overpriced, then, under those circumstances, it might not be treating the developer uniformly and fairly, if they are required to buy the house after that time frame, it being listed way over market.
Q. I'm glad you mentioned that, because that leads into my next concern about the document and just the ideas of a Property Value Guarantee. Isn't it true that there could be a negative impact to the homeowner for a home being on the market for a prolonged period of time?
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A. Well, the longer a property sits on the market, then the more it gets stale and the less interest the market has in it. So, yes, it's important to price a property consistent with the market in that local market area, in order for it to be successfully marketed and then sold.
Q. And, now, referring to Page 35 on Buttolph Exhibit 33. And, as I interpret Page 35, where it talks about "Agreed to asking price", "determination of asking price by appraisal", it seems like there's a very open process here for the guarantor, as well as the person who is selling the property, to derive what is going to be the asking price?
A. Yes.
Q. Couldn't that process take a while?
A. Well, it is not without time expenditure, but it's, you know, relatively nominal in the context of what's -what an agreement or [inaudible] would accomplish is a much less significant problem or time issue than the worst case scenario, where nobody could sell their home, but that would be the worst case scenario. MR. STELTZER: Great. Thank you. CHAIRMAN GETZ: Other questions?
(No verbal response)
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CHAIRMAN GETZ: Mr. McCann, I have a couple of questions about your testimony from August 31. BY CHAIRMAN GETZ:
Q. And, I'm going to be referring just to the letter, and looking at the top of Page 2. And, what I'm trying to understand is basically your line of reasoning. And, if I look at the top paragraph, the second sentence, it says "Thus, the applicant's documentary evidence actually demonstrates a probable significant impact to the aesthetics, views and market value of the most impacted views and homes." When you speak to "documentary evidence of the applicant", which evidence -- which "documentary evidence" are you speaking about?
A. Well, what $I$ was specifically referring to there was the LBNL, or Hoen study. And, the figure, I believe it was ES-2, Page 22 of the Hoen Webinar, as well as the other one on Page 20. And, regardless of how they constructed or articulated their study, what that figure on Page 20 actually shows is that, when the quality of a scenic vista is at a premium level, there's a higher value. And, when that scenic vista is lower, then there is a lower demonstrable value. And, in my opinion, this data shows that, with the vista impacted by the turbines, that the impact to the
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aesthetics is fairly represented by this data, it's very consistent with what other case study data shows, what other empirical prima facie evidence shows of sale prices near and far from turbine facilities. It also very closely mirrors the admittedly more negative comments of turbine neighbors or other people in communities that maybe are not so much neighbors, but find the aesthetics very objectionable. And, I agree absolutely that not everybody agrees with them, but there is a significant, big enough part of the market that does see it that way, that there is an aversion to buying homes in turbine project locations. The base, that sentence on Page 2 of my August 31 prefiled testimony recognizes the general view of -- from people in closest proximity that the vista or aesthetic quality of their views are negatively impacted, and marries [sic?] that with the data shown on Page 20 of the Hoen report that is only solving for scenic vista.
Q. So, when you speak here about a "probable significant impact", you are equating that to an unreasonable adverse effect on aesthetics?
A. Well, I believe I've been trying to be very clear on it. Yes, it is not a reasonable -- it is an unreasonable impact on the aesthetics, when it's going
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to have that much impact on all the ways that $I$, as an appraiser, and that mirrors the market, can measure these impacts. And, that's from views, that's from noise, that's from property sales, that's from issues of fear. As counsel noted, I am not a medical doctor, while I have read several clinical studies that are finding that there is a correlation between turbines and health issues. It's more from a real estate perspective that I look at these studies that -- and I've read these reports, because the people in the market that are thinking of buying or selling near turbines have access to this information, and it includes many firsthand accounts of -- [interrupted audio] conspiracy [interrupted audio] -- true. But, from a real estate perspective, --
Q. Mr. McCann --
A. -- there's a fear of these projects --
Q. Mr. McCann, we lost --
A. -- from firsthand experience.
Q. We lost the tail end of your answer there.
A. What $I$ was really closing with was that there is enough concern in the public about health issues, about noise issues, about aesthetic issues, that it is translating into properties either being abandoned, selling at
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extremely low prices relative to what they should have been sold at, and, in some cases, being bought out by developers and just bulldozed to get rid of the problems.
Q. And, it's your testimony that, based on your opinion, gathered from your experience in these other areas, that a 25 percent or greater value reduction can be reasonably expected for many of the approximate 200 homes?
A. Yes, sir. Whatever the impact number is, within a couple miles, yes, I believe that is a good expect -good characterization, good expectation, a probable expectation of the average impact. And, that is not a reasonable impact on the aesthetics. It's very unreasonable.
Q. And, for this Subcommittee, going forward, I guess it's your opinion that every proposed facility will have an unreasonable adverse effect, per se?
A. Are you -- when you say "every proposed facility", are you saying every turbine in the Groton Application or every wind energy project, regardless of where it's located?
Q. It seems to follow from your position that every proposed wind project would have an unreasonable
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adverse effect?
A. Well, it has the potential to. There are some that are actually sited so far from any residential structures, other than perhaps the lessors or stakeholders, that those did not need to buy out properties or make Property Value Guarantees. And, if there's any impact on the closest homes, it probably is the stakeholder or lessors, who are going to have a little trouble, you know, perhaps selling their home, especially if they try to sell it separate from the rental income from the turbine leases.

But, no, it's not a one-size-fits-all solution. What it is is a probable result in any occupied or populated area. But I would not say that that same finding is true out in the west Texas desert areas. But I would note, just anecdotally, T. Boone Pickens, when he was planning the world's biggest wind farm, was asked about putting turbines on his 60,000 acre ranch in Texas, and he was quoted in the paper as saying "No, he's not going to put them on his property. Those things are ugly." I found that a little amusing, actually, that a big proponent would be that honest about his own project.
Q. Then, let me direct you to the bottom of Page 1 of your
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## letter.

A. Okay.
Q. And, the last sentence says "However, as the LBNL study did not focus on the home sales nearest turbine areas, within distances comparable to the nearest homes in the Groton project, the LBNL study is considered to be unreliable for the purpose of the Iberdrola Siting application."
A. Yes.
Q. And, "considered", you're talking about "considered by you" or is "considered" as a general proposition?
A. Well, $I$ think, as a general proposition, if you take this in the context of my communications with Mr. Hoen, where I was discussing with him the proportional relevance of data. And that, in my opinion, the areas that are most heavily impacted is where the focus should be, yet he, in his decision to create a huge database, extended out to as far as 10 miles away. And, as I discussed with him that, by having data measured against that large background, doesn't that pretty much just, you know, force the conclusion that there is no statistical significance in the close-in proximity? And, you know, he designed his study the way he designed it, you know, following his thesis for
his Masters in New York, you know, the Department of Energy had hired him and Lawrence Livermore to basically replicate that study under a new heading. But what I do point out is that, to him and my review of the LBNL study, and I'm alluding to here and elsewhere in this letter, that there is a measured 5 percent loss in his study in the closest proximate area, a mile to 3,000 feet and 3,000 feet, those approximate distances. And, that is where the focus really should have been in the area closest. And, I know that the Groton Project, the nearest home, at least as I understand it, is about 2,700 feet from the nearest turbine. And, then, there's, you know, many others within the one mile radius. So, this is where the focus should really be, because this is the area of greatest likelihood of impact. Hoen and the LBNL study kind of "puts the wrong shoe on the wrong foot", is another way of putting it.

BY DR. KENT:
Q. I'd like to follow up on that, on that same statement about "LBNL not focusing on home sales near the turbine areas." Do you know how many homes were studied within one mile of turbines?
A. Bear with me, make sure that I'm -- I'm trying to find
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the correct table. But, from memory, it's something on the order of 125 , but bear with me. (Short pause) Yes, I believe it was 125. On Page 22 of the Hoen Webinar, under the "Nuisance Stigma", two columns. Both of those 5 percent figures are showing that, within 3,000 feet, for example, there are a number of "67", and, between 3,000 feet and one mile, there's "58".
Q. Correct.
A. So, 125 sales, yes.

MS. GEIGER: Excuse me. I apologize,
Dr. Kent, for interrupting. But $I$ want to make sure that we're all looking at the same document. The Applicant submitted with its application the LBNL study, I believe that that is in Appendix 37 to our volumes. I believe what the witness is talking about is a document that Mr. Buttolph has marked as an exhibit, a Webinar, or some pages of what looks like a PowerPoint or some other presentation. So, I want to make sure that we're talking about the same thing. And, I thought I heard you ask a question about the report, the LBNL report that the Applicant had provided in support of the Application. I believe what the witness has been responding with is information from the Webinar information that Mr. Buttolph
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has put in. I just want the record to be clear, and I want to make sure that $I$ understand.

DR. KENT: Yes. I am talking about the report, not the Webinar, which Mr. McCann has acknowledged reading on several occasions during his testimony this morning. So, when I speak, I'm not talking about the Webinar. Although, there's some duplicate information in the Webinar.

BY DR. KENT :
Q. So, we were at 125 homes. From your reading of the report, did you find any method -- any mention that the report excluded additional homes within one mile of turbines?
A. Yes. There was a footnote. And, if you'll bear with me a second, $I$ can tell you exactly where that footnote is located. Okay. On Page 14 of the Hoen study, the original study, there are -- it reports that there are four instances in the study areas where homes were sold to wind developers. In two cases, the developers did not resell the home, and in the other two the developer resold the home at a lower price. And, goes on to claim that these sales were to a related party, but, frankly, that just clearly shows a lack of understanding what constitutes a "related party" for a
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property sales selection and assessment bodies as where he was deriving his data from.
Q. But you understand that the study was trying to look at unbiased sales figures of houses, and the exclusions you mentioned, would they have been unbiased?
A. No. What they would have shown is an impact from the turbines. The original sale, I would presume, was based on agreement between the developer and the seller, as they, as I had understood it, had noise and health complaints, and the developer agreed to buy them out.
Q. Excuse me. Let me stop you there, because we don't need to go down this path. So, your opinion is that these houses would have sold for less if they had gone to the open market. But we did not go to open market, so we cannot actually objectively determine whether those houses would have sold for less.
A. Well, the developer paid what's an agreed price, and that's part of a typical negotiated transaction, and they sold them at huge discounts. This is what the market will bear, when, frankly, maybe the developer had some extraordinary motivation to buy, like to keep bad press from coming out about the effects on those homeowners. But this is not data that was excluded for
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the reasons that Hoen claims it was excluded. He excluded it on the basis of "related party sales", and, again, that is not accurate as far as -- "related party sale" is from a father to a son, an uncle to a cousin or that kind of thing, a family sale. That's what a "related party" transaction is, that every state I've ever worked in, the equalization boards exclude those sales, because they would tend to distort the true value for purposes of setting equalization factors and tax rates. They only use market sales. Granted, these four sales that are referenced in the Hoen study were bought -- were triggered by the development of the turbines, and then the impact on those neighbors. And, I don't have all the documentation that shows exactly how they got to that original price, but 1 know how it works in general, 30 years later in the business. And, they wouldn't have paid more than they had to, and they wouldn't have sold for less than they had to. But Hoen excluded those sales, claiming they were related party sales, when that, in fact, was not true. And, one analyst $I$ read, who is an expert in statistics, showed that, if those sales were included, that 5 percent within 1 mile would be changed to 9 percent, which then rises beyond "statistical significance", in Hoen's
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framing of it.
CHAIRMAN GETZ: Okay. Other questions from the Subcommittee?
(No verbal response)
CHAIRMAN GETZ: Mr. Buttolph, do you have redirect for Mr. McCann?

MR. BUTTOLPH: I do not. Thank you.
MS. LEWIS: I'm sorry, I did have a few redirects, if $I$ could do that? It's been difficult, because he's over there, so we can't communicate, just trying to keep the --

CHAIRMAN GETZ: Okay. So, you have redirect?

MS. LEWIS: I do.
REDIRECT EXAMINATION
BY MS. LEWIS:
Q. Mr. McCann, I just wanted to clarify one thing. If there was a Property Value Guarantee put through for this Project, as has been thoroughly discussed this morning, if, in fact, Iberdrola is correct, and there's absolutely no impact on homes, will they have to pay a penny in that whole Property Value Guarantee to anybody?
A. I only heard part of your question. So, maybe it's a
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distance to the microphone?
Q. Okay. I'll try again.
A. Okay. Thank you.
Q. As far as the Property Value Guarantee as it's been discussed, if that was to be put as a condition during this Project, and if Iberdrola was correct in that there's absolutely no property value impact throughout any of the residences in that area, would Iberdrola have to pay any homeowners any money whatsoever, if there was no impact?
A. There is an inter-reaction between whether or not a property owner finds that they can continue to live with peaceful use and enjoyment of their home and the values. So, if Iberdrola is correct, absolutely correct, that there is no impact on values, and one of the neighbors found that "the noise alone is why I want to relocate, $I$ want to move and sell", that Iberdrola would pay them for the market value of their property. And, then, if they were correct, absolutely correct, they would turn around and resell that property at the same market value, without any impairment to the value, if they're correct.
Q. So, if I understand you, just to clarify, there would be no cost whatsoever to the Applicant if, based on
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what they had said, there will be no impact to property values, then this will cost them nothing. Is that correct?
A. They might even make money on it. If they sell at -if they buy it at the appraised value, and sell homes at, you know, rent them out for a couple years, and sell them at the increased market, when the market rebounds, better than where it's at currently, they could actually make money on it. But, frankly, I think that there is a correlation between the sound impacts, the aesthetics, and the market value. And, frankly, I wouldn't be testifying here today with my opinions if I didn't truly believe that there was going to be some impact. So, I think Iberdrola, if they do have to buy out homes, will probably lose some money, a de minimis level, compared to the dollars involved in the Project.
Q. Thank you. My second question is just to follow up on the Webinar again, which is Exhibit 1-A that we've spoken quite a bit about this morning. If you look at Page 31, --
A. I'm sorry, what? 1-K?
Q. Page 31 of the Webinar of Ben Hoen.
A. Okay. Page 20?
Q. Thirty-one. Three one.
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A. Thirty-one. Yes.
Q. I'm sorry, it's actually Page 32.
A. All right.
Q. Okay. It seems that there's a little confusion with Ben Hoen and his opinions or they have changed. Could you read for the Committee please the second bullet down, regarding Ben Hoen's suggestions on how to manage property value risks.
A. The second bullet point?
Q. Yes. Where it starts with "offer".
A. He suggests "conducting follow-up studies (for example, surveys and appraisals)."
Q. I'm sorry, the first bullet.
A. The first bullet. He recommends, to manage risks, "Offer some combination of neighbor agreements/incentives and/or property value guarantees (for example, Dekalb County)", which has been offered a Property Value Guarantee like I recommended, "to nearby homeowners as are economically tenable and legally workable."
Q. Is this a little bit different from what Ben Hoen had stated previously, as far as his overall opinions on property values?
A. Well, this is an addition, and this follows, quite
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frankly, some of the fallout and comment and so forth from his original study, including my review of that study. Why he did not incorporate that recommendation into his original report, you would have to ask him. But I know he has now updated the recommendation I made to him essentially into this, although he has watered it down a little bit.

MS. LEWIS: Thank you. No further questions.

WITNESS MCCANN: Thank you.
CHAIRMAN GETZ: Anything further from
the Subcommittee?
(No verbal response)
CHAIRMAN GETZ: Ms. Geiger, did you --
MS. GEIGER: Yes, I have a question for recross that will be limited to questions that were asked on redirect. So, I won't go beyond that.

CHAIRMAN GETZ: Please proceed.
MS. GEIGER: Thank you.
RECROSS-EXAMINATION
BY MS. GEIGER:
Q. Yes. Mr. McCann, I believe, in response to questions from Ms. Lewis, you indicated or described your

Property Value Guarantee proposal as something that
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"would require a wind farm developer to pay a property owner who has that Property Value Guarantee a predetermined amount of money upon the property owner's complaint." Is that your testimony?
A. No, I might have paraphrased and shortened up, and, obviously, it's a longer document than that statement, maybe the implied -- what I was trying to imply there is that the complaint ends up resulting in basically reflecting a loss of use -- a frequent loss of use and enjoyment of the property as a result of the turbines that results in complaints. And, under those circumstances, I would expect that many homeowners that don't have absolute roots to the community would be willing to relocate to get away from that kind of noise, if not being relocated, then payment for the loss of value is another option.
Q. I guess I'm not understanding how your Property Value Guarantee would work. Would you just describe what would trigger an obligation on the part of an Applicant or a project owner to actually have to pay a property owner some amount of money?

MR. ROTH: Mr. Chairman, this question
is beyond the cross-examination.
CHAIRMAN GETZ: I'm going to permit it,
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because I believe the redirect asked "is there going to be any impact from the Property Value Guarantee?" And, it goes to that issue. Ms. Geiger.

BY MS. GEIGER:
Q. Yes. I just -- I apologize if the question is not stated exactly as I indicated just now. But, basically, $I$ want to understand exactly what it is that will trigger a wind farm owner's obligation to pay a property owner under your Property Value Guarantee?
A. Well, basically, under two different ways. One, assuming that the property owner chooses to sell and relocate, that the lack of marketability, because of the turbines, after an appropriate period of time to market it, would trigger their obligation to buy the property, which, of course, they can turn around and try to resell it then. The other would be, if the nuisance is such that the appraised value reflects the before and after conditions, and let me just say this, that I would -- I would not be the appraiser to perform that appraisal, it should probably be somebody from within New Hampshire on a case-by-case/property-by-property basis, that is intimately familiar with those specific markets, that that type of event could trigger a payment for the
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difference in market value.
MS. GEIGER: Okay. Thank you. I don't have anything further.

CHAIRMAN GETZ: Okay. Anything from the Subcommittee?
(No verbal response)
CHAIRMAN GETZ: Hearing nothing, then the witness is excused. Thank you, sir.

WITNESS MCCANN: Thank you. Have a good day.

CHAIRMAN GETZ: Well, at this juncture, I think at least Mr. Patnaude would be prepared to make a motion for a recess. But, before we do that, who would be the next witness, Mr. Buttolph?

MR. BUTTOLPH: I think I am.
CHAIRMAN GETZ: Okay. Let's take 15 minutes, come back, and we'll have the direct and cross of Mr. Buttolph. And, then, my plan after that would be to try and take the lunch recess around 1:00. So, let's recess for 15 minutes.
(Whereupon a recess was taken at 11:30
a.m. and the hearing reconvened at 11:55
a.m.)

CHAIRMAN GETZ: Okay. Mr. Buttolph,
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[WITNESSES: Buttolph~Spring]
we're back on the record and proceeding to your testimony.
MR. BUTTOLPH: Mr. Chairman, after consultation with my intervenor group here, and also I believe we have an agreement with the parties, we are going to do a panel instead, if it's all right with you, two of us on the panel, and then Cheryl will be by herself later.

CHAIRMAN GETZ: Okay.
MR. BUTTOLPH: Is that okay?
CHAIRMAN GETZ: That's fine.
MR. BUTTOLPH: Okay.
(Whereupon James Buttolph and Carl S.
Spring were duly sworn and cautioned by
the Court Reporter.)
CHAIRMAN GETZ: Ms. Lewis, will you qualify the witnesses.

MS. LEWIS: Hello. I'm not sure if I'll
get this right --
CHAIRMAN GETZ: You can sit down.
MS. LEWIS: Okay.
JAMES BUTTOLPH, SWORN
CARL S. SPRING, SWORN
DIRECT EXAMINATION
BY MS. LEWIS:
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Q. I'd like to introduce Mr. Buttolph and Mr. Spring, both intervenors from Rumney. And, I would like to verify that Mr. Buttolph is the same Mr. Buttolph that entered prefiled testimony into this docket, 2010-01?
A. (Buttolph) I am.
Q. And, Mr. Spring, are you the same Mr. Spring that entered your prefiled testimony into this docket for Groton Wind also?
A. (Spring) Yes, I am.
Q. And, Mr. Buttolph, do you have any further supplemental testimony to add, any changes that have taken place?
A. (Buttolph) I only have a couple of small housekeeping changes to my prefiled testimony, if I may. On Page 5 of my prefiled testimony, there is -- I'll get that out here. In approximately the middle of the page, it says "On the PJM grid, the record hourly demand so far has been 144, 644 megawatts on August 26, 2006." That should have said "August 2nd, 2006". That was a typographical error. And, also, on Page 11, oh, about two-thirds of the way down the page, there is a sentence which says "According to the United States Government's Energy Information Administration, net generation in 2007 for wind power amounted to 31,000,000,000 billion kilowatt-hours." There's one
> too many billions in that. It should simply say "31", scratch the zeros, "billion". Those are just the two changes that $I$ have. Other than that, I have no changes.
> Q. Mr. Spring, do you have any additions that would need to be added from your original prefiled testimony?
> A. (Spring) No, I don't.

MS. LEWIS: Thank you. The witnesses are available for cross-examination.

CHAIRMAN GETZ: Okay. Thank you.
Mr. Roth.
MR. ROTH: Thank you. Good morning, Mr. Buttolph.

WITNESS BUTTOLPH: Good morning.
MR. ROTH: Mr. Spring.
WITNESS SPRING: Good morning.
MR. ROTH: Thank you for being here and enduring this process with us, and capably and smoothly participating with us.

CROSS-EXAMINATION
BY MR. ROTH:
Q. In your testimony, Mr. Buttolph, you spoke of wind energy "not being cost-effective". And, in an answer to a data request about it, you responded by suggesting
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that "biomass was more cost-effective." And, I just wanted to ask you a couple of questions about that. And, first is, in balancing costs, aren't the environmental impacts of biomass also pretty significant?
A. (Buttolph) Well, I think that they are. I'm not an expert, however, in the environmental impacts on biomass. The reason that $I$ was using biomass as a comparison is biomass has been defined as one of the key sources that's important for the accomplishment of the legislation which is in front of us, that the State of New Hampshire needs to accomplish 25 percent of renewable energy by the year 2025. Biomass is one of those things.
Q. So, given that it's of greater efficiency, and perhaps in your view more cost-effectiveness, what if the Applicant were proposing to build a biomass plant up on the land that it's using, and plan to log the leased land and the surrounding territory for biomass fuel. Would that be acceptable to you?
A. (Buttolph) I think that it would be more acceptable than this Project. And, the reason I think that is because it would take much less space. It also would not necessarily need to be perched, in fact, it
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wouldn't make sense to have it perched on the very top of the ridgelines. Certainly wouldn't be in the corridor, damage to the avian populations and that sort of thing. So, I think nobody wants to have power in their backyard necessarily, but that would be less obtrusive, certainly, than the wind farm is looking that we're going to have.
Q. Okay. What do you -- there was some question about the capacity factor, and you had your own views on what the capacity factor of this plant is. What do you think that this power plant's capacity factor is actually going to be?
A. (Buttolph) That is a great question. I don't have a crisp answer. And, the reason that $I$ don't have an answer is because I think that the most effective comparison base would be perhaps through another plant that is similar in nature, and that there's no better comparison than the Lempster plant. When you look at the Lempster plant, it has the same turbines, it's in an area that has similar wind quality from what I've been able to read. One of the things that $I$ found on trying to understand specific project's capacity factors is that, while there is a lot of available information out in the websites and so forth, you can
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search and find all kinds of general information. What's held very close to the vest is specific project information to do comparisons against. There are some questions that $I$ had with regard to getting information about Lempster, and I understand earlier this week there was some information perhaps that's going to be coming forward as a result of some questions from the Committee. But 33 to 36 percent, what we've seen and what I've seen on my searches of some of this more general information, is that typically these capacity factors are overstated.
Q. Okay. Bear with me for one moment please. There was a question $I$ was going to ask you, but I'm not able to, because $I$ didn't bring the paper that $I$ thought $I$ had. So, I'll move onto my next line. What's the capacity factor of a coal plant?
A. (Buttolph) I don't know.
Q. Or a biomass plant?
A. (Buttolph) Biomass plant, according to University of Massachusetts-Amherst, I believe it is, typically in the 80 percent range.
Q. Okay. Now, you also I think asserted in your testimony that "operating a wind plant requires additional fossil fuel plants to run." What did -- you referred to them
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as "spinning resources".
A. (Buttolph) Right.
Q. What did you mean by that?
A. (Buttolph) Due to the intermittent nature of wind farms, recognizing that they're unpredictable, that they can surge power onto the grid or shut down when the wind stops, we have to be ready at all times to bring on line additional power sources to make up for the fact that the wind may die down at any moment in time. So, I think you'll see that more significantly in some of the areas out in the Midwest and out in the West, where perhaps there's higher percentages of wind, where you can have a gust of -- a storm come through, and these wind farms will be cranking a lot more power out onto the grid, and then the variability can be more significant, and you'll have to have these generators ready to come on line. But that's what's meant by "spinning reserves". They're ready to go.
Q. Okay. But here don't we have those resources already running? We have the Seabrook Nuclear Power Plant, we have the coal-burning and gas-burning plants in New Hampshire that are pretty much on all the time, right?
A. (Buttolph) Well, yes, they're on all the time. But, if the whole idea is they're going to be able to throttle
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them down to some degree, in order to replace that with wind and therefore save the CO2 emissions, the notion -- what I'm suggesting is that you can't -- it isn't a one-for-one switch. You can't just, for every megawatt-hour you lose on your carbon burning, because you can't replace it with one megawatt-hour of wind, you have to have a little bit -- you have to have a little bit of carbon to offset the fact that wind is liable to slow down and speed up from time to time. So, you're not -- you aren't replacing it one-for-one. And, in Mr. Cherian's testimony, he was suggesting some one-for-one replacement was my understanding in some of his prefiled testimony.
Q. So, it's less than "one-for-one"?
A. (Buttolph) Yes.
Q. And, do you know how much less than one-for-one?
A. (Buttolph) Well, I've been seeing a number of things. I've seen some numbers as high as 80 percent. But I think, generally, it's much smaller than that. It's probably in the 2 to 3 percent range from some of the things that I've been reading.
Q. I guess I didn't understand that answer. "80 percent" of one-for-one --
A. (Buttolph) Yes, let me try to explain it this way. We
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have one megawatt-hour of coal, we'd like to replace that with wind. So, we would bring on one megawatt-hour of wind, but you wouldn't be able to eliminate that entire megawatt-hour of coal. You would have to bring it down to some small fraction. So, 2 or 3 percent of what it was. So, 2 or 3 percent of one megawatt-hour.
Q. Okay.
A. (Buttolph) So, that's what I'm saying.
Q. All right. So, the reduction -- so, the loss, if you will, is relatively small, off of one-for-one?
A. (Buttolph) Yes. I think that's probably fair, yes.
Q. Okay. I took from your testimony sort of a complaint that "it's kind of a waste of money to spend all this money to develop this little amount of power." And, I guess I ask you this: If the developer is willing to take the risk that, after investing 120 million in a facility like that, and then getting some money back from the government, there's still a lot -- there's a lot of money out the door, right? And, let's say, under a conservative estimate, they get 16 megawatts out of it. Under what criteria would the Site Evaluation Committee say that that's a bad idea? I mean, isn't it their money to throw away, if they want?
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A. (Buttolph) Well, that's a good question. But there are other things to keep in mind. For example, for every -- my understanding is every kilowatt-hour that they're producing, there's an additional 2.1 cents of a tax credit, which is taxpayer money, so we should be concerned about that. I also understand that the way the pricing system works is, depending upon which contracts that they have in their buy-ahead market, they could be paying, we, as ratepayers, could end up paying perhaps higher rates than what we're paying today, even though wind is free. So, there's impacts like that.
Q. But I guess the question is the same. What criteria put in front of the Site Evaluation Committee would worry about those things and prohibit that from happening?
A. (Buttolph) Well, I should think what they would do, first of all, they need to balance -- balance the perceived need for this power against the impacts to the entire community, and to some of the downsides which are out there. And, that's been one of our big concerns. So, they would have to look at that balance, and decide, even if Iberdrola were to want to donate these windmills for free, we have a lot of things we
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got to be concerned about. We have to be concerned about the impacts to wildlife and historical impacts. We have to be concerned certainly about real estate impacts, which we've heard earlier. And, as I mentioned, of course, we've got to look at those rates and really understand whether that's going to be an affordable contribution, in terms of what ratepayers are going to be paying. But, even if they donated the whole thing, we certainly have those environmental impacts and the impacts to property owners. So, I should think that would be a concern. And, they have to try to balance that. And, then, that's what I think the legislation suggests is their responsibility is to do.
Q. Okay. Do you remember, were you here a few days ago when I asked "how much in Stimulus money Iberdrola had received as a whole?"
A. (Buttolph) I wasn't here when you asked that, but I had read, I believe it was actually an ABC News article.
Q. Okay.
A. (Buttolph) That I had understood that they had received \$577 billion, according to ABC News.
Q. $\quad 577$ billion"?
A. (Buttolph) Oh, I'm sorry. Million dollars. They
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received $\$ 577$ million. I believe the wind industry, in total, was about $\$ 2$ billion.
Q. Okay. And, is that -- was that the news article that you attached to your data responses, which are at Public Counsel Number 8, a ABC News article dated February 9th, 2010?
A. (Buttolph) Yes, I'm sure that's it. Yes.
Q. And, then, my last question for you, Mr. Buttolph, is how much did you spend to bring Mr. McCann's testimony and cross-examination to the Committee?
A. (Buttolph) Can I speak for the group?
Q. Yes.
A. (Buttolph) Yes. We were trying to calculate that earlier. Our estimate right now is it's going to be about $\$ 6,000$, in total, approximately.
Q. Thank you. Now, Mr. Spring, I noted from your testimony that you have, appears to be, at least to my untrained eye, a considerable amount of fire fighting experience and training?
A. (Spring) Yes. That's correct.
Q. Are you a volunteer with the Rumney Fire Department?
A. (Spring) No, I'm not.
Q. Okay. Why not?
A. (Spring) I work out of town. The company I'm employed
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by, most of our work is in Boston, and the job that I'm presently on now is in Albany, New York, the State Capitol. I'll be there for five years.
Q. That's kind of a long way to respond to an alarm, isn't it?
A. (Spring) That's correct. I'm home a day and a half a week, roughly.
Q. Okay.
A. (Spring) At present.
Q. Good explanation. I didn't know that. Have you had an opportunity to review Chief Clogston's testimony?
A. (Spring) Yes. I've reviewed his prefiled testimony there.
Q. Okay. And, do you agree with his conclusions and recommendations?
A. (Spring) As far as the equipment and training and such?
Q. That's correct.
A. (Spring) Yes. That's a reasonable request.
Q. Okay. And, you have probably heard on several occasions Mr. Cherian repeatedly asserting that "the project construction equipment and trailers carrying project components will fit up Groton Hollow Road, without clearing, regrading and straightening", correct?
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A. (Spring) I've heard that statement made, yes.
Q. Okay. And, do you agree with that?
A. (Spring) No, I do not agree with that statement.
Q. And, why not?
A. (Spring) As a resident, I live on Groton Hollow. And, I'm sure the Site Committee has been up it. If you recall, there was a number of sharp turns and bends, a lot of those are along the brook. Where, if you bring a long tractor-trailer in, you're going to have to cut way to one side or the other, so the back end of the trailer is not in the brook. There's trees in the way in several spots.

As you go up, I don't know whether you recall, there was a real sharp hump, just above the one little culvert there. If you have a low-boy, and low-boy semis obviously run, what, 8-10 inches off the ground, when you go through there, you're going to have a really tough time not grounding out and high-centering that trailer.

Further up the road, you're going to encounter a well on your left, a septic system on your right, and the width of that opening is, jeez, 25, 30 feet at best. And, by doing that, you're also going to be in the guy's front yard. So, the road
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right-of-way is not 34 feet there. It's a very -- it's a bottleneck.
Q. Have you -- are you aware that there is an agreement with I believe the -- one of the towns to repair the road and restore it to its original condition after it is used by the Project?
A. (Spring) Yes, I am.
Q. Would you think that it might be nice not to have the road restored to its original condition, and, in fact, have it be improved a little bit?
A. (Spring) No. We like living on a dirt road with a few potholes. It slows people down. It's a dead-end road. We live there for a reason. We picked that site. You know, it's -- we don't want a blacktop road. Blacktop roads are also higher maintenance than a good, solid base gravel road.
Q. I'm not suggesting necessarily a blacktop road, but perhaps a little better gravel road, with some proper drainage and culverts and that kind of stuff. If they were to do that, wouldn't that make things better in Groton Hollow?
A. (Spring) A smoother road would be nicer. But, there again, our Road Department takes excellent care of the Hollow Road. It's graded. Drainage is of minimal
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issue. We haven't had any washouts since the logging operation washed out the road, and that was, oh, eight, nine years ago.
Q. What was that about?
A. (Spring) There were temporary bridges across Clark Brook and its upper tributaries. And, we had a large rainstorm. And, those temporary bridges backed up with water, and then they just kind of dominoed down, and just like a dam bursting, come down and took out half of Groton Hollow Road, took out some property along the road, residential property, so it had to be rebuilt.
Q. Okay. Now, do you know how many trucks will pass on Groton Hollow Road during the construction of the Project?
A. (Spring) Actual trucks, no. Ed had stated about 150 workers will be working up there. So, at best, say 100 cars per day. With the amount of concrete going in, you're going to look at 10 or 15 trucks of concrete just for a pad. So, it's going to be a substantial number. And, that would vary day to day. And, therein lies another problem with the width of the road. In many areas, two cars cannot pass unless you pull over, pretty close to being in what would normally be the ditch. And, there are areas, particularly in front of
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my land, there's no pulling over, you're in the brook. There it is.
Q. But you must have had to deal with encounters with an outbound logging truck and an inbound resident in an automobile?
A. (Spring) Oh, yes. Yes.
Q. So, you're able to do that, right?
A. (Spring) Yes. You look ahead, and at the twist of the road, if you see lights coming in the evening, you, if you're at a spot where you know you can pull over, you wait and let the other car or truck come through. You just -- it's not a game of chicken.
Q. It's basically a one-lane, one-way road?
A. (Spring) I would say "lane and a half".
Q. Lane and a half, okay. Do you know how much logging truck traffic there is in any given year?
A. (Spring) The actual number of trucks? It varies, in the winter, in the summer, sometimes you'll see four or five a day, just in the time that I'm home, when I am home on weekends, prior to work.
Q. Are there other ways into the land for loggers?
A. (Spring) No. This is the only access, Groton Hollow Road.

MR. ROTH: Okay. Thank you. That's all
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[WITNESSES: Buttolph~Spring]
the questions I have.
CHAIRMAN GETZ: Thank you.
Mr. Sinclair, did you have any questions?
MR. SINCLAIR: None. Thank you.
CHAIRMAN GETZ: Ms. Geiger or Mr. Patch.
MR. PATCH: Actually, I'm going to start with Mr. Spring, and then Ms. Geiger is going to cross-examine Mr. Buttolph. Good morning.

WITNESS SPRING: Good morning. How are you? Oh, it's afternoon now.

MR. PATCH: Yes, it is. Thank you.
BY MR. PATCH:
Q. Mr. Roth alluded to this before, but it appears from your prefiled testimony that you have a fair amount of fire-related experience, is that fair to say?
A. (Spring) That's correct.
Q. I think you even referred to being a volunteer fireman at some point?
A. (Spring) Correct.
Q. An Assistance Chief on the Fire Brigade, a Certified Public Safety Instructor. You've taken or taught fire [first?] aid, CPR, and advanced first aid classes?
A. (Spring) Correct.
Q. And, there's a data request that Public Counsel asked
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you that I want to show to you. It's part of Public Counsel 11, PC 11. And, I don't know if you have a copy there with you. It would be your response to Question Number 4. And, if you don't, I've got a copy here I can show you.

MR. ROTH: I can show him that.
BY THE WITNESS:
A. (Spring) Oh, the training for the Rumney Fire Department?

BY MR. PATCH:
Q. That's right. I mean, the question was "Please describe any trainings or equipment that you think would be appropriate for the Rumney Fire Department and EMS squad to have as mentioned on Page 2 of the Prefiled Direct Testimony of Carl Spring." And, could you read your answer into the record.
A. (Spring) Sure. "I would defer this to the Rumney Fire Department [and] Fire Commissioners, as they know the present training of [the] firemen and emergency medical support personnel. As for training and equipment, this again would go to the Rumney Fire Department, along with all others in the mutual aid call list. Those departments will set up a preplan on what they need for equipment and training, for any call that may come from
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the wind farm. This could be first aid, fire, spill, high tower rescue, helicopter evacuation, etcetera."
Q. Are you familiar with the agreement that the Town of Rumney has signed with the Applicant?
A. (Spring) Yes, $I$ just received a copy of it earlier.
Q. And, you're familiar with the emergency response provisions contained in that agreement, including the provisions about training of the Rumney Fire Department, EMS, and Police personnel, and about reimbursement for extraordinary emergency response events?
A. (Spring) What part in particular? There are several items here. As far as the number of hours of training?
Q. Well, there are provisions that relate to emergency response, I think it's on Page 3 of 6, "Emergency Response", and there are five subsections, I guess I'd call them, under 6, 6.1 through 6.5. And, they all relate to training, they relate to reimbursement for extraordinary emergency response events. And, apparently, the Town of Rumney is satisfied with that, including the Fire Department. Is that correct?
A. (Spring) No, I cannot agree with that. The Selectboard has agreed to this. I didn't see any signatures here from the Fire Commissioners.
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Q. Well, then I'm going to direct your attention to Applicant's Exhibit 16. I don't know if you have a copy of that?
A. (Spring) No, I don't.
Q. I'd be happy to --
(Atty. Patch handing document to Witness Spring.)

WITNESS SPRING: Thank you.
BY MR. PATCH:
Q. And, this is a copy of the meeting minutes from the Town of Rumney, when they basically adopted the agreement.
A. (Spring) You're referring to where it says "Rumney's fire chief, Ken Ward, has told the Selectmen that the Rumney Fire Department does not need any additional equipment"?
Q. That's correct.
A. (Spring) That's in disagreement with what the Fire Commissioners and others have stated in the Mutual Aid Program, is my understanding.
Q. But that's the Fire Chief speaking to the Selectmen in the Town of Rumney, correct?
A. (Spring) That's correct.
Q. And, you have an agreement in front of you --
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MR. ROTH: Mr. Chairman, I'm going to object to this line of questioning. It's not clear what the Fire Chief of Rumney said to the Board of Selectmen. I don't think that the minutes are all that unambiguous. And, we have apparently fairly clear testimony from Chief Clogston the other day, which I thought very unambiguously said that, in his recent conversations with the Fire Chief, that was not his view at all. And, that the Fire Chief stood by the requests that were being made.

MR. PATCH: Mr. Chairman, I think we have conflicting reports about what the Fire Chief from Rumney has or hasn't said, admittedly. But I think the agreement between the Town of Rumney, obviously, speaks to emergency response issues, and the minutes I think pretty accurately represent what is there. And, I don't need many more questions in this area. I think, perhaps, the point's already been made, but --

MR. ROTH: I don't have any objection to him asking any questions about the agreement with the Town of Rumney Selectmen. But $I$ think it's clear, from Mr. Spring's testimony and Chief Clogston's testimony, that going beyond that to suggest agreement by the Fire Commissioners or the Fire Chief of Rumney is not appropriate.
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CHAIRMAN GETZ: Well, I think we have two different issues here. I think we certainly need to get into the record the minutes, and they're already in there. But I think what you're saying, Mr. Roth, is we should give more weight to what Chief Clogston said about what Chief Ward said than what the minutes say about what Chief Ward said. And, I think the weight, the appropriate weight to be given is an issue for the Subcommittee to take into account what the Chief testified to and what this document says. So, I will permit the further inquiry.

MR. PATCH: And, Mr. Chairman, if I could just point out, I understand that the Committee is not bound by the rules of evidence, but clearly what Chief Clogston was saying is hearsay.

MR. ROTH: As is the minutes from the Town of Rumney.

CHAIRMAN GETZ: And, that's why we get back to it's a question of what weight we should give to what appears to be conflicting testimony. But 1 will allow further inquiry about this, because we seem to have new actors who are introduced in here, the "Fire Commissioners", I think today is the first I've heard of them.
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WITNESS SPRING: Right. The Fire Commissioners are elected by the public. We, the people, elect those. The fire chief is appointed by the Selectmen.

CHAIRMAN GETZ: And, now, you're testifying about what you heard what the Fire Commissioners may have said?

WITNESS SPRING: Right. Talking of the Fire Commissioners.

CHAIRMAN GETZ: All right. So, more issues of weight that we need to give to testimony and documents in this proceeding.

MR. PATCH: I have no further questions.
Thank you.
CHAIRMAN GETZ: Thank you. Ms. Geiger.
MS. GEIGER: Yes. Thank you, Mr.
Chairman. My questions are for Mr. Buttolph. Good afternoon, Mr. Buttolph.

WITNESS BUTTOLPH: Good afternoon.
BY MS. GEIGER:
Q. Have you ever been to a wind farm?
A. (Buttolph) No.
Q. You haven't. So, you've never seen a wind farm that's owned by Iberdrola?
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A. (Buttolph) I have never seen one. That's right.
Q. Okay.
A. (Buttolph) Not in person. I've seen them, obviously, in pictures.
Q. Okay. Were you aware of the bus tour that the Applicant provided for any Rumney resident to the Lempster Wind Farm?
A. (Buttolph) Yes.
Q. Okay. I'm assuming that you did not attend that bus tour, since you've said you've never been to a wind farm, is that correct?
A. (Buttolph) That's right. I had a Boy Scout conflict.
Q. Okay. Have you ever been up onto the Groton Wind Project site?
A. (Buttolph) Yes.
Q. And, when did you go there?
A. (Buttolph) I've been there -- it's been a number of years ago. It's quite sometime ago. And, when you say the "site", I guess I should be clear on that. I've skied at Tenney Mountain a number of times, and I guess that's not actually on the site. So, perhaps -- I've been in the general vicinity of the site. But, as far as right over the property line, perhaps I should change that, say "no", perhaps not.
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Q. Okay.
A. (Buttolph) So, I'm not sure, totally sure.
Q. So, you didn't attend the publicly noticed site tour that the Committee and others went on in June of this year, is that correct?
A. (Buttolph) That is correct.
Q. Okay. And, why not?
A. (Buttolph) I didn't recall -- I don't recall seeing it. I'm sure it was noticed and so forth, but I just plain missed it. I didn't see it.
Q. You just didn't know about it?
A. (Buttolph) Right.
Q. Okay. But you had filed -- when did you file to intervene in this docket?
A. (Buttolph) Well, that's a matter of record.
Q. Do you recall offhand if it was before June?
A. (Buttolph) I believe, I don't recall exactly.
Q. Okay.
A. (Buttolph) I'm sure it's in the record.
Q. Okay. Now, turning to your prefiled testimony, you say that "Approval of a wind farm like Groton Wind will necessarily consume the availability of limited transmission equipment." Is that your testimony?
A. (Buttolph) That sounds familiar, yes.
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Q. Could you please identify the "limited transmission equipment" that you're referring to?
A. (Buttolph) My understanding would be that, depending upon where other facilities would need to go, that you would be perhaps putting some additional strain with some other proposed transmission into, for example, Beebe.
Q. Okay. Is it your position that an energy facility that necessitates the upgrade of transmission equipment or the installation of new facilities should not be built?
A. (Buttolph) No.
Q. Okay. Do you have a degree in wildlife management?
A. (Buttolph) I do not.
Q. Are you a wildlife biologist?
A. (Buttolph) I am not.
Q. Have you ever conducted an avian study?
A. (Buttolph) No.
Q. Is it your testimony or position that the Applicant didn't survey enough days during its spring and fall migration surveys?
A. (Buttolph) I don't have a position personally on that, other than my having communicated what I understand HMANA's position is.
Q. Okay. But I believe you prefiled testimony on this
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point, did you not?
A. (Buttolph) I did.
Q. Okay. And, do you remember what your opinion was in your prefiled testimony?
A. (Buttolph) Yes.
Q. What was that?
A. (Buttolph) It was that you surveyed an insufficient amount of time.
Q. And, in your opinion, how days should have been surveyed by the Applicant?
A. (Buttolph) Should have been consistent with HMANA's guidelines.
Q. And, what are those?
A. (Buttolph) Throughout the entire migration period.
Q. Every day?
A. (Buttolph) Yes, I believe so.
Q. Okay. Are you aware that the Applicant coordinated with the New Hampshire Fish \& Game Department and the U.S. Fish \& Wildlife Service on its proposed migration study protocols?
A. (Buttolph) Yes.
Q. Okay. And, did you know that neither of those two agencies ever voiced any objection to the manner in which the Applicant was conducting its surveys?
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A. (Buttolph) I don't recall reading any of their -- any concerns that they may have voiced to that. Right.
Q. Okay. And, on Page 9 of your prefiled testimony, you say "regarding migrating songbirds". And, I'll let you take a minute to find that, so you can see what I'm talking about.
A. (Buttolph) Yes. Got it.
Q. Okay?
A. (Buttolph) Uh-huh.
Q. I believe you say that, "Regarding migrating songbirds, radar studies did not indicate duration or times of nightly surveys." Is that what you're saying there?
A. (Buttolph) That's what those words say, yes.
Q. And, I think you go onto say that "the results given are highly suspect in that their radar studies were only conducted in the hours around midnight when birds are known to be migrating at higher elevations." Is that your testimony?
A. (Buttolph) That's what it says, yes.
Q. Okay. Now, I'd like to show you a couple of documents that are contained in -- in what I believe has been marked as "Applicant's Exhibit Number 4", which is Volume IV of the Application. And, in Volume IV of the Application, under Appendix 30, we have a table, it's
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called "Appendix A: Table 2." And, it's the "Summary of passage rates by hour, night, and for entire season." Do you see that? I'll let you take a minute to look at that.
(Atty. Geiger handing document to Witness Buttolph.)

BY MS. GEIGER:
Q. Mr. Buttolph, my question is, isn't it true that on that table, the information is recorded by night and by hour after sunset, is that correct?
A. (Buttolph) Yes. I see some missing dates here. But, for example, we go from April 23rd to April 27th and to April 29th. So -- but I see, yes, it's by night, and as you've described the passage rates.
Q. Okay. And, isn't it also by hour as well? More specifically, "passage rate by hour after sunset"?
A. Yes, it does say that as well.
Q. Okay. So, at least, and I will represent to you that there is a similar table, Appendix A, Table 2, under Appendix 31, in that same volume. And, if you want to take a look at it, you may. But Table 1 -- Table 2, excuse me, that $I$ just referred to, was the Spring 2008 Radar Survey Report and Appendix 31 is the Fall Survey Report.
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A. (Buttolph) Okay. So, I'm looking here at the spring report, that's Appendix A, Table 1. And, what was the other table, I'm sorry?
Q. If you flip to Appendix 31 --
A. (Buttolph) Yes, I think I'm there. Oh, I'm sorry.
Q. Flip to 31, and just look at this table over here.
A. (Buttolph) Okay.
Q. And, I guess my question is, isn't it true that both of those tables do in fact show the duration and the time of the nightly surveys, notwithstanding your testimony?
A. (Buttolph) Yes, it does appear that way.
Q. Okay. Now, turning to Page 10 of your prefiled testimony, you state: "Like humans, a bird's visual acuity is hammered under certain light and weather conditions. Many birds migrate at night and descend to rest and forage in the forested habitats in the hours around dawn and ascend during the hours around dusk to continue their journey. At these times perception is reduced and the likelihood of a bird detecting spinning turbine blades due to motion smear is very low." Is that your testimony?
A. (Buttolph) Yes.
Q. And, could you tell me the reference upon which you rely in making that statement?
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A. (Buttolph) That general -- that whole section was from a Kim Van Fleet, who was a biologist in Pennsylvania. And, I believe I disclosed that she had assisted me in that particular portion. There was -- there was one other publication that I believe I disclosed to you during the technical session or perhaps a data request, where I had briefly scanned another text. And, I think that was --
Q. Is this -- I think I'm going to show you or 1 will show you what the Applicant has marked as its "Exhibit 29". Is this the reference that you refer to?
A. (Buttolph) That's the one $I$ was just speaking of. But what I wanted to do was ensure I had erred on the side of disclosing everything, because I know you want to make sure we do that. It's very important that, if there's anything that even might have -- I might have gleaned something out of, I wanted to make sure it was included.
Q. So, did this inform your judgment about birds' visual acuity?
A. (Buttolph) There is a comment in there about the birds not being able to, let's see now, I think I actually --
Q. Well, actually, could you read into the record the highlighted sentence that I have on Page 141?
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A. (Buttolph) That's at 147? That's the page I'm on.
Q. I'm sorry. 147, I'm sorry.
A. (Buttolph) "Walls suggested that animals traveling at great speed (i.e., falcons) have increased visual acuity to detect movement and avoid collision." So, is that consistent with your testimony?
A. (Buttolph) That particular line does not appear to be, no.
Q. Is there anything else in there that supports your position?
A. (Buttolph) I had read this sometime ago. I got -- I wanted, like I said, I wanted to disclose that I read it. But it doesn't appear that there's anything that was significant that I translated into my testimony.
Q. Okay. Now, on Page 10 of your prefiled testimony, you state that "The placement of industrial scale wind turbines on this area that is part of a key migration corridor is a bad idea." Is that your testimony?
A. (Buttolph) It sounds familiar. Where are we here? We're on Page 10?
Q. I believe so.
A. (Buttolph) It sounds like something I would have said, but I'm just trying to find it here. Yes. Okay. Yes, that's my testimony. Right.
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Q. And, what do you mean by a "key migration corridor"?
A. (Buttolph) Well, that's been the subject of some discussion $I$ understand. Areas where birds tend to fly along ridgelines. I know that there's been some discussion about migration corridors being perhaps wider than that. But, certainly, this is an area where birds tend to $f l y$ along the ridgelines, and this is information that certainly the folks at HMANA would vouch for as well.
Q. And, what's the size of this "key migration corridor" that you're referring to?
A. (Buttolph) In this general area, that would be in the -- from one mountain ridge to the next one, which would be to the east.
Q. Do you have a medical degree?
A. (Buttolph) No.
Q. Do you have a degree in acoustical engineering?
A. (Buttolph) No.
Q. Are you a licensed real estate appraiser?
A. (Buttolph) No.
Q. Do you have any training or experience in conducting real estate appraisals?
A. (Buttolph) No.
Q. Do you know the capacity of the Seabrook Nuclear Power
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Plant? Do you know how many megawatts of electricity it is capable of producing?
A. (Buttolph) I have read that in the context of looking at the total amount of power that is produced in New Hampshire and the percentage of that nuclear power that relates to the total power produced. I don't recall it off the top of my head, though.
Q. Do you know whether the -- well, if I were to --
A. (Buttolph) It's about half. It's about half the state.
Q. If I were to suggest to you that roughly the capacity of the Seabrook Station is around 1,200 megawatts, would you have any reason to disagree with that?
A. (Buttolph) 1,200 megawatts. Again, I'd have to look at the data.
Q. Do you know if the Seabrook Nuclear Power Plant operates at 100 percent of the time?
A. (Buttolph) It does not.
Q. And, do you know for how long approximately every year it goes off line?
A. (Buttolph) I don't know that, no.
Q. Okay. Do you know whether it goes off line for things like refueling every year?
A. (Buttolph) I'm sure it does.
Q. Okay. Do you know that -- do you have any knowledge
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about whether it is -- it stays off line for any significant period of time, either before or after refueling?
A. (Buttolph) I'm sure it could, yes.
Q. Okay. So, for example, if I were to suggest to you that, in 2009, from October through December, that the Seabrook plant did not operate, would you have any reason to disagree with that?
A. (Buttolph) I would not. But I don't know that.
Q. Okay. I guess I have one last question. What is your understanding of the -- of the responsibility of New Hampshire's ratepayers to pay for any of the costs associated with this Project?
A. (Buttolph) Well, I guess you have to define "ratepayers". I would also say taxpayers are ratepayers. So, it's more than just "how much does a ratepayer pay in their electric bill?" So, we've got to broaden that a little bit. When we start looking at the types of incentives that some of these programs -some of these projects have been receiving, in terms of the $\$ 577$ million we talked about before as an example, clearly every one of us is paying something to help these wind farms look viable, in terms of their economic analysis.
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MS. GEIGER: Okay. I have no further questions.

CHAIRMAN GETZ: Thank you. Members of the Subcommittee? Mr. Steltzer.

MR. STELTZER: Yes. Mr. Spring, thanks so much for being here today.

WITNESS SPRING: No problem.
BY MR. STELTZER:
Q. I'm glad you're here, because I trying -- I asked this question yesterday, and I'm really looking to get some input from folks that live on Groton Hollow Road.

MR. ROTH: He doesn't.
BY MR. STELTZER:
Q. Excuse me, do you live on Groton Hollow Road?
A. (Spring) Yes, I do.

MR. ROTH: Oh, I'm sorry. I thought you were talking to Mr. Buttolph. I apologize.

MR. STELTZER: No problem.
BY MR. STELTZER:
Q. And, I've heard from the Applicant that -- some of the reasons, really, two of the reasons that they have proposed this alternative distribution line to connect the operation and maintenance facility to Route 25. And, why it was shifted was due to two reasons, really.
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The fact of some folks on Groton Hollow Road being opposed to utilizing the existing poles that are there, as well as some uncertainty as far as the ownership or the easement, where the easement actually is for those poles.

I'm trying to understand, it's my understanding that these poles are 34.5 kV lines. They're the kind of lines I have outside my house right now. And, there are thousands of them across the state. So, I'm trying to understand what the objection is towards having, not transmission lines, but just normal distribution lines going down that road?
A. (Spring) It's my understanding, when the representatives from New Hampshire Electric attended the Selectmen's meeting where the public was invited, they stated that there's a number of easements that go back who knows how many years, and I guess some of those were very strict in the use of that easement for the electric lines to have a right-of-way. And, also, the location, they said that's not a good location to bring them down Groton Hollow, it's just not a good idea. Personally, $I$ have one pole on my land that sits completely on my land, and the poles zig-zag from both sides of the road. So, you're going to be looking at,
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what, potentially 20 -- 15, 20 different landowners, depending on how you ricochet them. And, a lot of landowners do not want electric poles on their land, whether it would be from this or anything.
Q. It's my --
A. (Spring) They're protective of their land and their rights.
Q. It's my understanding, though, that they, for the majority of it, they could just use the existing poles that are there though?
A. (Spring) I don't know, some of them poles are pretty old and scrawny. You start hanging new wires on there, you're definitely going to have to replace the pole. The wires are definitely going to have to be raised just to get trucks up through. Logging trucks, why they don't catch some of them wires is beyond me. I mean, we're looking at 12,13 feet, with the bow in the wire on some of those, when they cross over the road from one side to the other.
Q. Okay. Thank you.
A. (Spring) Uh-huh.
Q. Mr. Buttolph, you mentioned a little bit about your concern about taxpayers paying for the incentives to the renewable energy industry, such as the production
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tax credit and the investment tax credit. Are you familiar at all with the subsidies that are available to the fossil fuel industry at all?
A. (Buttolph) Not in as much detail, no.
Q. Would you believe that some folks may characterize them as "substantial"?
A. (Buttolph) Yes, I'm sure they do. Yes.
Q. And, would you believe that there are some analysts who suggest that, if those subsidies were not available to the fossil fuel industry, that renewable energy might be more cost-effective for an energy source?
A. (Buttolph) I believe I had recalled reading some comparison about various sources. And, I had understood that wind power to be perhaps the most -one of the most heavily subsidized of any of those choices. But I'm sure that there are some people who agree with your characterization that the more traditional forms of power do have high amounts of subsidy.

MR. STELTZER: Thank you.
CHAIRMAN GETZ: Other questions?
Dr. Kent.
DR. KENT: I have two questions for Mr .
Spring.
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WITNESS SPRING: Sure.

BY DR. KENT:
Q. If the Project were to donate some equipment, some fire-fighting equipment, where do you think the best place to store that equipment would be?
A. (Spring) Oh, it would definitely be Rumney. That has the closest response time. And, the equipment that Rumney presently has, it would be like taking a VW to the Daytona 500; you don't do it. The trucks we have now are not designed to go off-road. They're lead attack pumpers. They stay on hard surfaces. You know, you don't take them out into the middle of the ball field, per se. So, yes, the equipment would stay in Rumney. That's going to give your best response time, and that's the object of the Fire Service.
Q. Thank you. And, reluctantly, I'm going to delve into the hearsay, just in case you can enlighten us. The Fire Commissioners, do you have any idea why they wouldn't communicate with us, if they had a differing opinion than was being expressed by the Town Selectmens? That, I have no idea. In talking with them, $I$ know they were trying to get together to have a meeting. Evidently, that didn't transpire, if you have not received any correspondence from them.
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DR. KENT: Okay. Thank you.
WITNESS SPRING: Uh-huh.
CHAIRMAN GETZ: Other questions?
(No verbal response)
CHAIRMAN GETZ: Okay. Hearing nothing,
then opportunity for redirect?
MS. LEWIS: I'm all set. Thank you.
CHAIRMAN GETZ: Okay. Then, the
witnesses are excused. Thank you, gentlemen.
WITNESS SPRING: Thank you.
CHAIRMAN GETZ: Okay. It's a quarter of one. I think it's a good time for the lunch recess. And, I would say that we'd resume at 2:00. And, at that time we would hear Ms. Lewis's testimony and cross-examination. And, then, after that, we will need to address the status of the Exhibit 44, and how to address other issues with respect to Historical Resources, Fish \& Game, items that we've talked about before, and, if there's anything about recalling Mr. Cherian as well, if that's been discussed.

So, is there anything else we need to talk about now or that -- well, let me leave it, is there anything else we need to discuss before lunch?

MS. GEIGER: I don't think so.
CHAIRMAN GETZ: Okay. Then, we're
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| 46:2;76:18;99:12 | 98:6 | against (8) | 132:22 | appearances (2) |
| :---: | :---: | :---: | :---: | :---: |
| accomplishment (1) | addition (1) | 24:2;26:22;65:21,22; | alternatively (1) | 5:9,16 |
| 99:10 | 91:24 | 66:14;82:20;101:3; | 19:17 | appears (4) |
| according (4) | additional (8) | 55:1 | although (3) | 12:3;107:17;113:13; |
| 17:18;97:21;101:19; | 23:7;56:2;85:12; | age (1) | 51:19;85:7;92:6 | 118:20 |
| 106:22 | 101:23;102:8;105:4 | 42:11 | always (2) | appendix (15) |
| account (6) | 116:15;122:5 | agencies (3) | 67:4;71:14 | 9:23;19:21;43:5;45:5; |
| 32:23;33:2;68:6,10, | additions (1) | 8:11,11;123:23 | Amendment (2) | 46:5;53:7;69:24;84:15; |
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